Attorney's Docket No.: 10274-063001 / A061 US 004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Mundy *et al.*	Art Unit	: 1644
Serial No.	: 10/086,217	Examiner	: Maher M. Haddad
Filed	: February 21, 2002	Conf. No.	: 5114
Title	: METHODS OF TREATING MULTIPLE MYELOMA AND MYELOMA-INDUCED BONE RESORPTION USING INTEGRIN ANTAGONISTS		

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF DR. GREGORY R. MUNDY UNDER 37 C.F.R. §1.132

I, Gregory R. Mundy, a citizen of U.S.A., residing in Nashville, Tennessee, hereby declare as follows:

1. I am the Director of the Vanderbilt Center for Bone Biology; a Professor of Medicine, Pharmacology, Orthopedics, and Cancer Biology; and the John A. Oates Chair in Translational Medicine at Vanderbilt University in Nashville, Tennessee. I received my initial doctoral degree in Medicine and Surgery from the University of Melbourne in Australia and my second degree in Medicine from the University of Tasmania in Australia, and I did postdoctoral work at the University of Rochester in New York. I have over 35 years experience in the field of bone disease. I have published over 540 scientific articles, including 2 articles specifically on integrin studies. A copy of my CV is attached.

2. I have reviewed the above-referenced patent application and the references discussed herein.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit

Signature

Typed or Printed Name of Person Signing Certificate

3. I have been advised and understand that the Examiner has rejected claims 86-89, 91, 93-97, and 101, which are directed to methods of treating multiple myeloma with an anti-I4 integrin antibody and a chemotherapeutic agent, as being unpatentable over Van Zaanen *et al.*, *Br. J. Haematol.* 102:783-790, 1998 ("Van Zaanen") in view of Masellis-Smith *et al.*, *Cancer Res.* 57:930-936, 1997 ("Masellis-Smith") and Lokhorst *et al.*, *Blood* 84:2269-2277, 1994 ("Lokhorst") and U.S. Patent No. 5,885,786 (1996) ("Cabot") or Alexanian *et al.*, *J. Am. Med. Assoc.* 208:1580-2685, 1969 ("Alexanian"). The Examiner argues that, at the time of priority (September 13, 1999), one of ordinary skill in the art would have been motivated to substitute anti-I4 antibodies for the anti-IL-6 antibodies taught by Van Zaanen, and to further combine the anti-α4 antibody with the chemotherapeutic agent melphalan, as taught by Cabot and Alexanian, for the treatment of multiple myeloma (MM).

4. At the time of filing, a practitioner of ordinary skill in this field would not, for numerous reasons, have believed that anti-α4 antibodies, such as anti-VLA-4 antibodies, would be interchangeable with anti-IL-6 antibodies to treat MM. First, the art did not teach the anti-IL-6 antibodies could be used to treat MM. For example, Bataille *et al.* ("Biological Effects of Anti-Interleukin-6 Murine Monoclonal Antibody in Advanced Multiple Myeloma" *Blood* 86:685-691, 1995; cited in the IDS submitted June 21, 2002; courtesy copied enclosed as Exhibit A) taught that anti-IL6 antibodies were not effective at treating MM. Bataille *et al.* reported that patients with advanced MM did not achieve remission or improved outcome following treatment with murine anti-IL6 monoclonal antibodies. Van Zaanen, which is relied upon by the Examiner, is a phase I dose-escalating study that, at best, shows that anti-IL-6 antibodies are not toxic. None of the patients involved in the study achieved a response according to standard criteria, even though effective IL-6 blocking was detected in 11/12 patients. See Van Zaanen in the abstract and in the discussion at page 787. The teachings of Van Zaanen do not overcome or refute the prior teachings of Bataille *et al.* that anti-IL-6 antibodies are ineffective for the treatment of MM. Evidence that anti-VLA-4 antibodies decreased tumor burden *in vivo* in a mouse model of myeloma bone disease is presented in the

above-referenced application (see, *e.g.*, page 66, lines 14-26), and the results of these studies were published in Mori *et al.* ("Anti-α4 integrin antibody suppresses the development of multiple myeloma and associated osteoclastic osteolysis," *Blood* 104:2149-2154, 2004, cited in the information disclosure statement (IDS) submitted herewith).

5. The Examiner has cited Lokhorst *et al.* as evidence that anti-VLA-4 antibodies inhibited IL-6 secretion *in vitro* by long term bone marrow cultures (LTBMCs) contacted with MM cells. The Examiner has considered this evidence in combination with Van Zaanen and Masellis-Smith to conclude that anti-VLA-4 antibodies can be used for the treatment of MM. One of ordinary skill in this field, however, would not arrive at this conclusion. In view of the fact that anti-VLA-4 antibodies decrease tumor burden in mouse models of myeloma bone disease, and that anti-IL-6 is not effective as a treatment for myeloma[1] (see paragraph 4), one of ordinary skill in this field would conclude that although anti-VLA4 antibodies can decrease IL-6 levels (at least *in vitro*), this does not appear to be relevant to the anti-tumor effect of the anti-VLA-4 antibodies. Anti-VLA-4 antibodies are believed to work through mechanisms that are independent of IL-6. Anti-VLA-4 antibodies kill myeloma cells by blocking direct interactions between myeloma cells and normal host cells in the bone marrow. When the myeloma cells cannot attach to the normal host cells, the myeloma cells die. There may be a concomitant decrease in IL-6 levels following administration of anti-VLA-4, but this is a byproduct and not the direct cause of myeloma cell death, nor the reason why the myeloma cells die.

6. At the time of filing, a practitioner of ordinary skill in this field would not have believed that anti-VLA-4 antibodies could substitute for the prednisone taught by Alexanian *et al.* in a combination therapy with melphalan for the treatment of MM. One of ordinary skill in the art would not make this substitution at least because anti-VLA4 antibodies and prednisone

[1] Batialle *et al.* report that some MM patients experienced improvements in some symptoms following treatment with a murine anti-IL-6 monoclonal antibody. For example, of the 3 patients who succumbed to progressive MM after less than 1 week of treatment, 2 exhibited marked inhibition of plasmablastic proliferation. Of the seven remaining patients, 3 had objective antiproliferative effect marked by a significant reduction of the myeloma cell labeling index within the bone marrow. One of these 3 patients received a 30% regression of tumor mass. The authors concluded, however, that none of the patients studied achieved remission or improved outcome as judged by standard clinical criteria. See Bataille *et al.* in the abstract.

are different types of molecules having different therapeutic targets, and therefore different therapeutic effects. As described in paragraph 5, anti-VLA4 antibodies are very specific targeting molecules that kill myeloma cells by blocking direct interactions between myeloma cells and normal host cells in the bone marrow. Prednisone is a broad spectrum agent which kills cancer cells regardless of whether or not they are interacting with other cells. Thus whether prednisone and melphalan in combination can be used to treat MM (as described in Alexanian) is irrelevant insofar as predicting whether a combination of an anti-VLA-4 antibody and melphalan can be used to treat MM. Even in view of Van Zaanen, Masellis-Smith, and Lokhorst, a therapeutic effect of a combination therapy of prednisone and melphalan for treatment of MM is not predictive of a therapeutic effect of a combination therapy of anti-VLA-4 antibodies and melphalan.

7. Evidence that an anti-IL6 receptor antibody in combination with melphalan can treat MM, as described in Nakamura (U.S. Patent No. 6,692,742) is also irrelevant insofar as predicting whether a combination of an anti-VLA-4 antibody and melphalan can be used to treat MM. An anti-IL6 receptor antibody will disrupt a multitude of pathways, as this receptor interacts with a class of ligands called gp130 ligands and gp80 ligands. See, *e.g.*, Schwabe *et al., J. Biol. Chem.* 269:7201-7209, 1994, cited on the attached IDS. Thus in view of evidence that a combination of anti-IL-6 receptor antibodies and melphalan can treat MM, one of skill in the art would not conclude that an anti-VLA-4 antibody (which disrupts a very different interaction) in combination with a chemotherapeutic agent would also be effective for the treatment of MM. As described in paragraph 5, studies described in the prior art indicate that anti-VLA-4 antibodies kill myeloma cells through a mechanism that is independent of IL-6.

8. A combination of melphalan and anti-VLA-4 antibody was observed to have a synergistic effect on the treatment of MM (see the specification at page 72, lines 6-20). As shown in Figure 8 of the specification, treatment with antibody alone (200 μg initial dose for the first week, followed by a maintenance dose of 100 μg) reduced IgG2b levels from about 2.7 mg/mL to about 2 mg/mL, and treatment with melphalan alone (100 μg) similarly reduced IgG2b levels from about 2.7 mg/mL to about 2 mg/mL. However, treatment with the

combination of antibodies and melphalan resulted in a much more significant decrease in IgG2b levels (from about 2.7 mg/mL to about 0.3 mg/mL). The effect of IgG2b levels is indicative of a decrease in tumor burden. The synergistic result observed with the combination of melphalan and anti-VLA-4 was unexpected and surprising because there was no reason to expect such a dramatic improvement in view of the mild effects observed with either melphalan or antibody alone.

9. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

DATE: Sept 11, 2006

GRMundy

Dr. Gregory R. Mundy

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

(9/07/06) CURRICULUM VITAE

MUNDY, Gregory Robert

Office Telephone - 615-322-6110

Citizenship - Dual (United States, Australia)

Secondary Education

1956-60 Trinity Grammar School, Kew, Victoria, Australia

Tertiary Education, Degrees, and Diplomas

1961-66 MB; BS (Bachelor of Medicine, Bachelor of Surgery), University of Melbourne

1966 E.C.F.M.G. (Certificate of Education Council for Foreign Medical Graduates)

1970 M.R.A.C.P. (Membership of Royal Australian College of Physicians)

1973 Doctor of Medicine, University of Tasmania

1974 FLEX (Federal Licensing Examinations)

1974 F.R.A.C.P. (Fellowship of Royal Australasian College of Physicians)

1975 Diplomate, American Board of Internal Medicine

1977 Diplomate, Subspecialty Boards in Endocrinology and Metabolism

Medical Licensure

Victoria, Australia	
Tasmania, Australia	
New York, U.S.A.	122297
Connecticut, U.S.A.	17068
Texas, U.S.A.	F-7583
United Kingdom	

Professional Societies and Organizations

Advisory Council, National Institute of Arthritis, Musculoskeletal and Skin Diseases (1997-2001)
American Society for Clinical Investigation
Association of American Physicians
American Society for Clinical Pharmacology and Therapeutics
American Society for Bone and Mineral Research
- Councilor, 1983-1985, 1995-1998
- Secretary-Treasurer, 1985-1991
- President, 1996-1997

Association of GCRC Program Directors
- Councilor, 1987-1989
Endocrine Society
American Association for the Advancement of Science
American Federation for Clinical Research
European Calcified Tissue Society
- Board Member, 1987-1988
Fellow, Royal Australasian College of Physicians
International Bone and Mineral Society
- Board of Directors, 1992-2001
- Vice President and President-Elect, 2001-2003
- President, 2003-2005
National Osteoporosis Foundation
- Scientific Advisory Board, 1985-
- Chairman, Research Grants Committee, 1988-1996
- Executive Committee, Scientific Advisory Board, 1991-1996
- Board of Trustees, 1996-
The Paget Foundation
- Scientific Advisory Board, 1991-
Southern Society for Clinical Investigation
- President, 1990
International Myeloma Foundation
- Scientific Advisory Board, 1993-
- Board of Directors, 1997-
CTRC Clinical Foundation Board of Trustees, 2000-2002
CTRC Research Foundation Board of Trustees, 2001-2002
SACI Executive Committee, 2002-2005

Experience

1/67-12/67	Junior Resident Medical Officer, Royal Hobart Hospital, Hobart, Tasmania
1/68-12/68	Senior Resident Medical Officer, Royal Hobart Hospital, Hobart, Tasmania
1/69-9/70	Professorial Medical Registrar, Royal Hobart Hospital, Hobart, Tasmania
10/70-8/72	Lecturer in Medicine, University of Tasmania, and Honorary Physician, Royal Hobart Hospital
8/72-5/74	Research Associate in Clinical Pharmacology, Department of Pharmacology and Toxicology, University of Rochester, Rochester, New York
5/74-6/77	Assistant Professor of Medicine, Division of Endocrinology and Metabolism, University of Connecticut School of Medicine, Farmington, CT
6/77-6/80	Associate Professor of Medicine, Division of Endocrinology and Metabolism, University of Connecticut School of Medicine, Farmington, CT
7/80-10/01	Professor of Medicine and Head, Division of Endocrinology and Metabolism, University of

Texas Health Science Center at San Antonio, Texas

3/82-1/00 Program Director, General Clinical Research Center, The University of Texas Health Science Center at San Antonio, Texas and Chief, Frederic C. Bartter Clinical Research Unit, Audie L. Murphy Memorial Veterans' Hospital, San Antonio, Texas

7/88-12/95 President and Scientific Director, OsteoSA Corporation, San Antonio, Texas

1/96- President and Scientific Director, OsteoScreen Inc., San Antonio, Texas

3/96-10/01 J.C. and Irene H. Heyser Memorial Professor of Bone and Mineral Metabolism, University of Texas Health Science Center at San Antonio, San Antonio, TX

6/99- Adjunct Professor of Medicine, University of Queensland, Brisbane, Australia.

10/00-6/06 Assistant Dean for Clinical Research, University of Texas Health Science Center at San Antonio, TX

6/01-9/02 SBC Chair in Cancer Research and Director, CTRC Institute for Drug Development, San Antonio, Texas

10/01-6/06 Assistant Dean for Clinical Research, UTHSCSA, San Antonio, Texas

9/04-9/05 Director of Orthopedic Research, University of Texas Health Science Center at San Antonio, San Antonio, TX

3/05-9/05 Principal Investigator, Cancer Center Support Grant, San Antonio Cancer Institute, University of Texas Health Science Center at San Antonio, TX

9/02-6/06 Professor, Department of Cellular & Structural Biology, University of Texas Health Science Center at San Antonio, San Antonio, TX

7/06- Director, Vanderbilt Center for Bone Biology, Professor of Medicine, Pharmacology, Orthopaedics, and Cancer Biology, Vanderbilt University, Nashville, TN

7/06- John A. Oates Chair in Translational Medicine, Vanderbilt University, Nashville, TN

Company Affiliations

Osteo SA CEO and President 1987-1995. Osteo SA was formed as a private spinoff from the bone biology group in the Endocrine Division at the University of Texas Health Science Center and in collaboration with ?????. It was a service-based company that raised $10m in support.

OsteoScreen CEO and President 1996- OsteoScreen was the successor of Osteo SA. It has raised over $25m from license deals, research contracts and SBIR grants.

NEOSIL Member, Board of Directors 2005 Neosil is a start-up specialty pharmaceutical company in Emergyville, CA. It licensed one of OsteoScreen's assets. OsteoScreen is a major shareholder in Neosil.

OsteoGenix CSO and Member, Board of Directors 2006 OsteoGenix is a start-up specialty pharmaceutical company based in Palo Alto, CA. It licensed one of OsteoScreen's assets.

Special Awards

American Cancer Society Faculty Research Award FRA-148, 1976-1981

Fuller Albright Award of the American Society for Bone and Mineral Research, 1982

MERIT Award from National Institutes of Health for grant AR28149 "The Monocyte-Macrophage System and Bone Resorption", 1986-1996

William F. Neuman Award of American Society for Bone and Mineral Research, 1999

University of Texas Presidential Distinguished Scholar, 1999

Editorial Boards

Bone
Calcified Tissue International
Journal of Clinical Endocrinology and Metabolism (1983-1988)
Journal of Bone and Mineral Research (1986-1993)
American Journal of Medical Sciences (1990-1998)
Journal of NIH Research (1989-1997)
Journal of Biological Chemistry (1997-1999)
Journal of Internal Medicine (2000-)

Peer Review Groups

Member, General Medicine B Study Section, 1981-1985

OsteoScreen, Ltd. Patents

US Patent No.:	5,599,708
Title:	Osteoclast Growth Regulatory Factors
Issue Date:	February 4, 1997
US Patent No.:	5,614,496
Title:	Use of Fibroblast Growth Factors to Stimulate Bone Growth
Issue Date:	March 25, 1997
US Patent No.:	5,656,598
Title:	Use of Fibroblast Growth Factors to Stimulate Bone Growth
Issue Date:	August 12, 1997
US Patent No.:	5,914,233
Title:	Screening Assay for the Identification of Agents Which Alter Expression of

	PTHrP
Issue Date:	June 22, 1999
US Patent No.:	5,919,808
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	July 6, 1999
US Patent No.:	5,922,753
Title:	Methods for Treating Bone Deficit Conditions with Benzothiazole
Issue Date:	July 13, 1999
US Patent No.:	5,939,444
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	August 17, 1999
US Patent No.:	5,948,776
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	September 7, 1999
US Patent No.:	5,965,573
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	October 12, 1999
Australian Patent:	706262
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	September 23, 1999
US Patent No:	5,990,169
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	November 23, 1999
US Patent No:	5,994,358
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	November 30, 1999
US Patent No:	6,008,208
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	December 28, 1999
US Patent No:	6,017,940
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	January 25, 2000
US Patent No:	6,022,887
Title:	Compositions and Methods for Stimulating Bone Growth
Issue Date:	February 8, 2000
US Patent No:	6,060,500
Title:	Suppression, by 5-lipoxygenase inhibitors, of bone resorption
Issue Date:	May 9, 2000

US Patent No:	6,083,690
Title:	Methods and Compositions for Identifying Osteogenic Agents
Issue Date:	July 4, 2000
US Patent No:	6,080,779
Title:	Compositions and Methods for Stimulating Bone Growth
Issue Date:	June 27, 2000
US Patent No:	6,153,631
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	November 28, 2000
US Patent No:	6,251,901
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	June 26, 2001
US Patent No:	6,342,514 B1
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	January 29, 2002
US Patent No:	6,376,476 B1
Title:	Isoprenoid Pathway Inhibitors for Stimulating Bone Growth
Issue Date:	April 23, 2002
US Patent No:	6,410,512 B1
Title:	Inhibitors of Proteasomal Activity for Stimulating Hair Growth
Issue Date:	June 25, 2002
US Patent No:	6,410,521 B1
Title:	Nutritional Supplements for Stimulating Bone Growth
Issue Date:	June 25, 2002
US Patent No:	6,413,998
Title:	Compositions and Methods for Treating Bone Deficit Conditions
Issue Date:	July 2, 2002
US Patent No:	6,462,019
Title:	Inhibitors of Proteasomal Activity and Production for Stimulating Bone Growth
Issue Date:	October 8, 2002
US Patent No:	6,492,333
Title:	Treatment of Myeloma Bone Disease with Proteasomal Inhibitors
Issue Date:	December 10, 2002
US Patent No:	6,642,216
Title:	A Method to Identify Compounds for Treating Bone Disorders
Issue Date:	November 4, 2003
US Patent No:	6,649,631
Title:	Compositions and Methods for Treating Bone Deficit Conditions

Issue Date:	November 18, 2003
US Patent No:	6,656,904
Title:	Inhibitors of Proteasomal Activity for Stimulating Bone and Hair Growth
Issue Date:	December 2, 2003
US Patent No:	6,720,344
Title:	Methods and Compositions for Stimulating Osteoblast Proliferation or Treating Malignant Cell Proliferation and Methods for Selecting Osteoblast Proliferation Stimulants
Issue Date:	April 13, 2004
Australian Patent:	771297
Title:	Inhibitors of Proteasomal Activity for Stimulating Bone and Hair Growth
Issue Date:	July 8, 2004
US Patent No:	6,838,252
Title:	Inhibitors of Proteasomal Activity for Stimulating Hair Growth
Issue Date:	January 4, 2005
US Patent No:	6,838,436
Title:	Inhibitors of Proteasomal Activity for Stimulating Bone Growth
Issue Date:	January 4, 2005
US Patent No:	6,884,769
Title:	Inhibitors of Proteasomal Activity for Stimulating Hair Growth (as Amended)
Issue Date:	April 26, 2005
US Patent No:	6,902,721
Title:	Inhibitors of Proteasomal Activity for Stimulating Bone Growth
Issue Date:	June 7, 2005
US Patent No:	6,958,220
Title:	Inhibitors of Proteasomal Activity for Stimulating Hair Growth
Issue Date:	October 25, 2005
Australian Patent:	784304
Title:	Inhibitors of Proteasomal Activity for Stimulating Bone and Hair Growth
Issue Date:	March 9, 2006

The University of Texas Health Science Center at San Antonio Patents

US Patent No:	5,534,524
Title:	Suppression by 5-Lipoxygenase Inhibitors of Bone Resorption
Issue Date:	July 9, 1996
US Patent No:	6,060,500
Title:	Suppression by 5-Lipoxygenase Inhibitors of Bone Resorption
Issue Date:	May 9, 2000

US Patent No:	6,455,541 B1
Title:	Suppression by 5-Lipoxygenase Inhibitors of Bone Resorption
Issue Date:	September 24, 2002
South African Patent No:	2001/2032
Title:	Methods of Treating Multiple Myeloma and Myeloma-Induced Bone Resorption Using Integrin Antagonists
Issue Date:	January 29, 2003
Eurasian Patent No:	004270 based on PCT/US99/21170
Title:	Methods of Treating Multiple Myeloma and Myeloma-Induced Bone Resorption Using Integrin Antagonists
Issue Date:	February 26, 2004
Singapore Patent No:	79378 based on PCT/US99/21170
Title:	Methods of Treating Multiple Myeloma and Myeloma-Induced Bone Resorption Using Integrin Antagonists
Issue Date:	May 31, 2004

Grant Support

"Effects of Tumors on the Skeleton"
Principal Investigator: Gregory R. Mundy, M.D
Program Director: Gregory R. Mundy, M.D.
Agency: NIH, NCI
Type: 2-P01-CA40035
Period: 12/1/05-11/30/10
Total: $958,420 (annual direct costs)

"Mechanism of Action of Statins on Bone Formation"
Principle Investigator: Gregory R. Mundy, M.D.
Agency: Veterans Administration
Type: Merit Review
Period: 4/1/03-3/31/08
Total: $135,000 (annual direct costs)

"Effects of the Mevalonate Pathway on Bone Formation"
Principle Investigator: Gregory R. Mundy, M.D.
Agency: NIH
Type: RO1 AR048801-01
Period: 5/1/03-4/30/08
Total: $201,213 (annual direct costs)

"Gli Control of PTH-rP and Osteolysis in Breast Cancer"
Principal Investigator: Gregory R. Mundy, M.D
Agency: NIH, NCI
Type: R01 CA114000-01
Period: 7/18/05-4/30/10

Total: $192,859 (annual direct costs)

"Ubiquitin-Proteasome Pathway and BMP-2 Expression"
Principal Investigator: Gregory R. Mundy, M.D
Agency: NIH, NIAMS
Type: R01 AR050605-01-A1
Period: 9/1/05-6/30/09
Total: $176,000 (annual direct costs)

"Health Care and Other Facilities"
Principal Investigator: Gregory R. Mundy, M.D
Agency: HHS; Health Resources and Services Administration
Type: CFDA number 93.887
Application number: 00016419; Award number: 2C76HF03583-02-00
Period: 9/1/04-8/31/06
Total: $492,080 (annual direct costs)

"OsteoScreen" (G.R. Mundy, M.D.)
OsteoScreen Ltd. is a small start-up biotechnology company whose goal is to develop anabolic agents for osteoporosis. Dr. Mundy is a consultant and director of research programs at OsteoScreen. It is supported by license payments, private funds and research contracts from pharmaceutical companies and NIH SBIR grants.

Bibliography

Dr. Mundy is the author of over 545 original articles, review articles and book chapters. He has published 2 monographs and edited 2 books.
Publications (*indicates those article which were peer reviewed)

* 1. Cutforth R, Mitchell RM, Mundy GR: Cytomegalovirus mononucleosis following renal haemodialysis. Med J Aust 2:1103-1104, 1968.

* 2. Freeman JW, Mundy GR, Beattie RR, Ryan CR: Cardiac abnormalities in poisoning with tricyclic antidepressants. Brit Med J 2:610-611, 1969.

3. Baikie AG, MacDonald CB, Mundy GR: Systemic nocardiosis treated with trimethoprim and sulphamethoxazole. Lancet 2:261, 1970.

* 4. Mundy GR: Infectious mononucleosis with pulmonary parenchymal involvement. Brit Med J 1:219-220, 1972.

* 5. Mundy GR, Cutforth RH: The relationship between serum lipid abnormalities and other major risk factors in myocardial infarction. Aust N Z J Med 1:8-12, 1972.

* 6. Mundy GR, Cutforth RH, Brooks PM: Serum lipid abnormalities and the atrial pacing test. Med J Aust 2:535-537, 1972.

* 7. Mundy GR, MacDonald CB: Atypical presentations of diffuse fibrosing alveolities. Brit J Dis Chest

66:261-267, 1972.

* 8. Mundy GR: Cytogenic Studies and DNA Content in Myeloma, With Reference to Other Features of the Disease. M.D. Thesis, University of Tasmania, 1972.

* 9. Mundy GR, McPherson DG: Variation in serum cholesterol levels after myocardial infarction. Med J Aust 1:278-282, 1973.

* 10. Mundy GR, Baikie AG: Myeloma treated with cyclophosphamide and terminating in reticulum cell sarcoma. Med J Aust 1:1240-1241, 1973.

* 11. Dartnall JA, Mundy GR, Baikie AG: Cytogenetic studies in myeloma. Blood 42:229-239, 1973.

* 12. Mundy GR: DNA values in myeloma. Cancer 32:61-68, 1973.

13. Raisz LG, Mundy GR, Luben RA: Skeletal reactions to neoplasms. Ann N Y Acad Sci 230:473-475, 1974.

* 14. Luben RA, Mundy GR, Trummel CL, Raisz LG: Partial purification of osteoclast-activating factor from phytohemagglutinin-stimulated human leukocytes. J Clin Invest 53:1473-1480, 1974.

* 15. Mundy GR, Fleckenstein L, Mazzullo JM, Sundararesan P, Weintraub M, Lasagna L: Current medical practice and the FDA; Some evidence for the existing gap. JAMA 229:1744-1748, 1974.

* 16. Mundy GR, Luben RA, Raisz LG, Oppenheim JJ, Buell DN: Bone-resorbing activity in supernatants from lymphoid cell lines. N Engl J Med 290:867-871, 1974.

* 17. Mundy GR, Raisz LG, Cooper RA, Schechter GP, Salmon SE: Evidence for the secretion of an osteoclast stimulating factor in myeloma. N Engl J Med 291:1041-1046, 1974.

18. Mundy GR, Raisz LG: Drugs for disorders of bones: Pharmacological and clinical considerations. Drugs 8:250-289, 1974.

19. Mundy GR, Raisz LG: Drugs for disorders of bones. New Ethic Med Prog 11:165-199, 1974.

20. Mundy GR, Raisz LG: Calcitonin: Background and uses. Drug Ther 38-42, April 1975.

21. Raisz LG, Trummel CL, Mundy GR, Luben RA: Immunologic factors influencing bone resorption: Role of osteoclast activating factor from human lymphocytes and complement-mediated prostaglandin synthesis. Proceedings of the 5th International Parathyroid Conference, Oxford, (Excerpta Medica) pp. 149-153, 1974.

* 22. Raisz LG, Luben RA, Mundy GR, Dietrich JW, Horton JE, Trummel CL: Effect of osteoclast activating factor from human leukocytes on bone metabolism. J Clin Invest 56:408-413, 1975.

* 23. Trummel CL, Mundy GR, Raisz LG: Release of osteoclast activating factor by normal human peripheral blood leukocytes. J Lab Clin Med 85:1001-1007, 1975.

24. Mundy GR, Raisz LG: Applied pharmacology of anti-hypertensive drugs. Conn Medicine 40:169-174, 1976.

* 25. Mundy GR, Shapiro JL, Bandelin JG, Canalis EM, Raisz LG: Direct stimulation of bone resorption

by thyroid hormones. J Clin Invest 58:529-534, 1976.

26. Raisz LG, Mundy GR, Dietrich JW, Canalis EM: Hormonal regulation of mineral metabolism. Int Rev Physiol 16:199-242, 1977.

* 27. Gailani S, McLimans WF, Mundy GR, Nussbaum A, Roholt O, Zeigel R: Controlled environment culture of bone marrow explants from human myeloma. Cancer Res 36:1299-1304, 1976.

* 28. Fleckenstein L, Mundy GR, Horovitz RA, Mazzullo JM: Sodium salicylamide: Relative bioavailability and subjective effects. Clin Pharm Ther 19:451-458, 1976.

29. Mundy GR, Canalis EM, Raisz LG: Modern concepts of calcium homeostasis. Conn Med 40:680-684, 1976.

30. Mundy GR, Canalis EM, Raisz LG: Osteopenia: Osteoporosis, osteomalacia, and other forms of decreased mineralized bone mass. Conn Med 40:753-757, 1976.

31. Canalis EM, Mundy GR, Raisz LG: Hypercalcemia: Diagnosis and therapy. Conn Med 41:16-21, 1977.

32. Canalis EM, Mundy GR, Raisz LG: Paget's disease of bone: Recent advances in therapy. Conn Med 41:79-82, 1977.

33. Mundy GR, Canalis EM, Raisz LG: Calcium and the kidney: Renal osteodystrophy and renal calculi. Conn Med 41:205-209, 1977.

34. Mundy GR, Raisz LG, Cooper RA, Schechter GP, Salmon SE: Evidence for the secretion of an osteoclast stimulating factor in myeloma. Yearbook of Cancer pp. 209-211, 1976.

35. Mundy GR, Raisz LG: Disorders of bone resorption. In: Disorders of Mineral Metabolism, Volume III. Edited by Bronner F, Coburn JW. Academic Press, New York, pp. 1-66, 1981.

* 36. Mundy GR, Raisz LG, Shapiro JL, Bandelin JG, Turcotte RJ: Big and little forms of osteoclast activating factor. J Clin Invest 60:122-128, 1977.

* 37. Mundy GR, Altman AJ, Gondek M, Bandelin JG: Direct resorption of bone by human monocytes. Science 196:1109-1111, 1977.

38. Mundy GR, Raisz LG: Osteoclast activating factor. In: Cholesteatoma - First International Conference. McCabe BF, Sade J, Abramson M, editors. Aesculapius Publishing Co., Birmingham, pp. 149-151, 1977.

39. Mundy GR: Medical grand rounds: from the Dempsey hospital of the University of Connecticut. The pathogenesis and therapy of a case of malignant hypercalcemia. Case Presentation. Conn Med 41:151-155, 1977.

* 40. Sherline P, Mundy GR: Role of the tubulin-microtubule system in lymphocyte activation. J Cell Biol 74:371-376, 1977.

41. Raisz LG, Mundy GR, Eilon G: Hypercalcemia of neoplastic diseases. In: Endocrinology of

Calcium Metabolism, Copp DH, Talmage RV (eds), Excerpta Medica, Amsterdam, pp. 64-70, 1978.

* 42. Koeffler HP, Mundy GR, Golde DW, Cline MJ: Production of bone resorbing activity in poorly differentiated monocytic malignancy. Cancer 41:2438-2443, 1978.

43. Zurier RB, Mundy GR: Paget's disease of bone. In: The Science and Practice of Clinical Medicine, Vol 4, Rheumatology and Immunology. Cohen A, editor. Grune and Stratton, Inc., New York, pp. 352-354, 1979.

44. Mundy GR, Eilon G, Altman AJ, Dominguez JH: Non-bone cell mediated bone resorption. In: Mechanisms of localized bone loss. Horton JE et al (eds), pp. 229-238, 1978.

45. Durie BG, Mundy GR, Salmon SE: Multiple myeloma: clinical staging and role of osteoclast activating factor in localized bone loss. In: Mechanisms of localized bone loss. Horton JE et al (eds), pp. 319-330, 1978.

46. Mundy GR, Raisz LG: Thyrotoxicosis and calcium metabolism. Min Electrol Metab 2:285-292, 1979.

47. Mundy GR: Calcium and cancer. Life Sci 23:1735-1744, 1978.

* 48. Altman AJ, Bandelin JG, Dominguez JH, Mundy GR: Differentiation of isolated calvarial cells into a mature heterogeneous bone cell population in culture. Metab Bone Dis Rel Res 1:75-79, 1978.

* 49. Mundy GR, Rick ME, Turcotte R, Kowalski MA: Pathogenesis of hypercalcemia in lymphosarcoma cell leukemia - Role of an osteoclast activating factor-like substance and mechanism of action for glucocorticoid therapy. Am J Med 65:600-606, 1978.

* 50. Mundy GR, Varani J, Orr W, Gondek MD, Ward PA: Resorbing bone is chemotactic for monocytes. Nature 275:132-135, 1978.

51. Mundy GR: Differential diagnosis of osteopenia. Hosp Pract 13:65-72, 1978.

* 52. Strumpf M, Kowalski MA, Mundy GR: Effects of glucocorticoids on osteoclast-activating factor. J Lab Clin Min 92:772-778, 1978.

* 53. Orr W, Varani J, Gondek MD, Ward PA, Mundy GR: Chemotactic responses of tumor cells to products of resorbing bone. Science 203:176-179, 1979.

* 54. Eilon G, Mundy GR: Direct resorption of bone by human breast cancer cells in vitro. Nature 276:726-728, 1978.

* 55. Yoneda T, Mundy GR: Prostaglandins are necessary for osteoclast-activating factor production by activated peripheral blood leukocytes. J Exp Med 149:279-283, 1979.

* 56. Durie BGM, Salmon SE, Mundy GR: Relation of osteoclast activating factor production to the extent of bone disease in multiple myeloma. Brit J Haematol 47:21-30, 1981.

* 57. Dietrich JW, Mundy GR, Raisz LG: Inhibition of bone resorption in tissue culture by membrane-stabilizing drugs. Endocrinology 104:1644-1648, 1979.

58. Mundy GR, Yoneda T: Osteoclast activating factor (OAF) production is dependent on prostaglandin synthesis by monocytes. In: Biochemical Characterization of Lymphokines. deWeck AL, Kristensen F, Landy M, editors. Academic Press, New York, pp. 123-127, 1980.

59. Mundy GR, Spiro TP: The mechanisms of bone metastasis and bone destruction by tumor cells. In: Bone Metastasis, Vol 4, Weiss L, Gilbert HA, editors. GK Hall, Boston, pp. 64-82, 1980.

* 60. Yoneda T, Mundy GR: Monocytes regulate osteoclast-activating factor production by releasing prostaglandins. J Exp Med 150:338-350, 1979.

* 61. Dominguez JH, Mundy GR: Monocytes mediate osteoclastic bone resorption by prostaglandin production. Calcif Tissue Int 31:29-34, 1980.

* 62. Heath H III, Weller RE, Mundy GR: Canine Lymphosarcoma: A model for study of the hypercalcemia of cancer. Calcif Tissue Int 30:127-133, 1980.

63. Mundy GR, Eilon G, Spiro TP, Yoneda T: Osteoclast activating factor and other mechanisms of hypercalcemia in malignancy. Metab Bone Dis Rel Res 2:173-176, 1980.

* 64. Spiro TP, Mundy GR: In vitro migration of Walker 256 carcinosarcoma cells: Dependence on microtubule and microfilament function. J Natl Cancer Inst 65:463-467, 1980.

* 65. Orr FW, Varani J, Gondek MD, Ward PA, Mundy GR: Partial characterization of a bone derived chemotactic factor for tumor cells. Am J Pathol 99:43-52, 1980.

66. Mundy GR, Raisz LG: Recent advances in the therapy of disorders of calcium and bone metabolism. Yearbook of Drug Ther pp. 7-30, 1981.

67. Mundy GR: Bone resorbing factors in myeloma. In: Workshops on Recent Advances and Future Trends in Myeloma. International Workshop, Montpellier, France, June 20-21, pp. 70-76,1980.

68. Mundy GR: Control of osteoclast function by lymphokines in health and disease. In: Lymphokines. Pick E, editor. pp. 395-408, 1981.

69. Mundy GR, Yoneda T: Monocytes: Interactions with bone cells and lymphocytes during bone resorption. In: Hormonal Control of Calcium Metabolism. Cohn DV, Talmage RV, Matthews JL, editors. Excerpta Medica, Amsterdam, pp. 178-181, 1981.

* 70. Binstock ML, Mundy GR: Effects of calcitonin and glucocorticoids in combination in hypercalcemia of malignancy. Ann Intern Med 93:269-272, 1980.

* 71. Mundy GR, Cove DH, Fisken R: Primary hyperparathyroidism: Changes in the pattern of clinical presentation. Lancet 1:1317-1320, 1980.

* 72. Eilon G, Mundy GR: Effects of inhibition of microtubule assembly on bone mineral release and enzyme release by human breast cancer cells. J Clin Invest 67:69-76, 1981.

* 73. McMillan P, Mundy G, Mayer P: Hypercalcaemia and osteolytic bone lesions in chronic lymphocytic leukaemia. Brit Med J 281:1107,1980.

74. Mundy GR: Clinical recognition and management of hypercalcemia in neoplastic disease. Intern Med 2:37-46, 1981.

* 75. Josse RG, Murray TM, Mundy GR, Jez D, Heersche JNM: Observations on the mechanism of bone resorption induced by multiple myeloma marrow culture fluids and partially purified osteoclast activating factor. J Clin Invest 67:1472-1481, 1981.

* 76. Yoneda T, Mundy GR: Release of the lymphokine osteoclast activating factor requires cyclic AMP accumulation. Calcif Tissue Int 34:204-208, 1982.

77. Mundy GR: Role of monocytes in bone resorption. Adv Exp Med Biol 151:401-408, 1982.

78. Mundy GR, Martin TJ: The hypercalcemia of malignancy: Pathogenesis and management. Metabolism 31:1247-1277, 1982.

79. Mundy GR: Local factors controlling bone resorption. Calcif Tissue Int 33:(Suppl) #134, 1981.

80. D'Souza S, Mundy GR: Humoral regulation of fetal skeletal growth and development. In: Perinatal Calcium and Phosphorus Metabolism. Holick MF, Gray TK, eds., Elsevier, New York, pp. 233-257, 1983.

* 81. Mundy GR, DeMartino S, Rowe DW: Collagen and collagen fragments are chemotactic for tumor cells. J Clin Invest 68:1102-1105, 1981.

82. Mundy GR: Involvement of prostaglandin synthesis in mechanisms of malignant hypercalcemia. In: Prostaglandins and Cancer. Powles TJ, Bockman RS, Honn KV, Ramwell P., eds., Alan R. Liss, New York, pp. 501-511, 1982.

* 83. Reeves J, Arnaud S, Gordon S, Subryan B, Block M, Huffer W, Arnaud C, Mundy G, Haussler M: The pathogenesis of infantile malignant osteopetrosis: Bone mineral metabolism and complications in five infants. Metab Bone Dis Rel Res 3:135-142, 1981.

84. Adams ND, Mundy GR: Therapy of hyper- and hypoparathyroidism. In: Current Therapy, HF Conn, editor. W.B. Saunders, Philadelphia, pp. 480-484, 1983.

85. Adams ND, Mundy GR: Clinical disorders of vitamin D metabolism. In: Contemporary Issues in Nephrology: Divalent Ion-Homeostasis, Volume II. BM Brenner, JH Stein, editors. Churchill-Livingston, New York, pp. 107-149, 1983.

* 86. Sica DA, Martodam RR, Aronow J, Mundy GR: The hypercalcemic rat Leydig cell tumor - a model of the humoral hypercalcemia of malignancy. Calcif Tissue Int 35:287-293, 1983.

* 87. Mundy GR, Rodan SB, Majeska RJ, DeMartino S, Trimmier C, Martin TJ, Rodan GA: Unidirectional migration of osteosarcoma cells with osteoblast characteristics in response to products of bone resorption. Calcif Tissue Int 34:542-546, 1982.

* 88. Martodam RR, Thornton KS, Sica DA, D'Souza SM, Flora L, Mundy GR: The effects of dichloromethylene diphosphonate on hypercalcemia and other parameters of the humoral hypercalcemia of malignancy in the rat Leydig cell tumor. Calcif Tissue Int 35:512-519, 1983.

* 89. Mundy GR, Wilkinson R, Heath DA: Comparative study of available medical therapy for hypercalcemia of malignancy. Am J Med 74:421-432, 1983.

* 90. Mundy GR, Poser JW: Chemotactic activity of the gamma-carboxyglutamic acid containing protein in bone. Calcif Tissue Int 35:164-168, 1983.

91. Mundy GR: The management of osteoporosis. Comprehensive Therapy 9:27-32, 1983.

92. Mundy GR: Monocyte-macrophage system and bone resorption. Lab Invest 49:119, 1983.

* 93. Simpson EL, Mundy GR, D'Souza SM, Ibbotson KJ, Bockman R, Jacobs JW: Absence of parathyroid hormone messenger RNA in non-parathyroid tumors associated with hypercalcemia. New Engl J Med 309:325-330, 1983.

* 94. Rodan SB, Insogna KL, Vignery A M-C, Stewart AF, Broadus AE, D'Souza SM, Bertolini DR, Mundy GR, Rodan GA: Factors associated with humoral hypercalcemia of malignancy stimulate adenylate cyclase in osteoblastic cells. J Clin Invest 72:1511-1515, 1983.

95. Bertolini DR, Mundy GR: Metastases to bone in mammals. In: Progressive stages of neoplastic growth. Martinus Nijhoff, Dordrecht, The Netherlands, 1985.

96. Mundy GR, Jacobs JW, Ibbotson KJ, D'Souza SM, Bertolini DR, Simpson EL: Hypercalcemia of malignancy. In: Endocrine control of bone and calcium metabolism. Cohn DV, Fujita T, Potts JT, Talmage RV (eds). Excerpta Medica, Amsterdam, pp. 278-283, 1984.

* 97. Ibbotson KJ, D'Souza SM, Ng KW, Osborne CK, Niall M, Martin TJ, Mundy GR: Tumor-derived growth factor increases bone resorption in a tumor associated with the humoral hypercalcemia of malignancy. Science 221:1292-1294, 1983.

* 98. Eilon G, Mundy GR: Association of increased cyclic AMP content in cultured human breast cancer cells and release of hydrolytic enzymes and bone resorbing activity. Cancer Res 43:5792-5794, 1983.

99. Mundy GR: Physiology and pathophysiology of bone resorption. Verhandlungen der Deutschen Gaesellschaft fur innere Medizin 89. Band, J.F. Bergmann Verlag, Munchen, 1247-1249,1983.

*100. Ibbotson KJ, Roodman GD, McManus LM, Mundy GR: Identification and characterization of osteoclast-like cells and their progenitors in cultures of feline marrow mononuclear cells. J Cell Biol 99:471-480, 1984.

*101. Mundy GR, Ibbotson KJ, D'Souza SM, Simpson EL, Jacobs JW, Martin TJ: The hypercalcemia of cancer: Clinical and pathogenic mechanisms. New Engl J Med 310:1718-1727, 1984.

102. Mundy GR, Ibbotson KJ, D'Souza SM, Bertolini DR: Animal models for tumor hypercalcemia. In: Bone Resorption, Metastasis, and Diphosphonates, Garattini S (ed.), Raven Press, New York, pp. 7-16, 1984.

103. Mundy GR, Bertolini DR: Osteoclast activating factor. In: F Labrie, L Proulx (eds.) Endocrinology International Congress Series 665, Excerpta Medica, Amsterdam, New York, Oxford, pp. 587-590, 1984.

*104. D'Souza SM, Ibbotson KJ, Smith DD, Mundy GR: Production of a macromolecular bone resorbing

factor by the hypercalcemic variant of the Walker rat carcinosarcoma. Endocrinology 115:1746-1752, 1984.

*105. D'Souza SM, Ibbotson KJ, Mundy GR: Failure of PTH antagonists to inhibit in vitro bone resorbing activity produced by two animal models of the humoral hypercalcemia of malignancy. J Clin Invest 74:1104-1107, 1984.

*106. Gutierrez GE, Mundy GR, Katz MS: Adenylate cyclase of osteoblast-like cells from rat osteosarcoma is stimulated by calcitonin as well as parathyroid hormone. Endocrinology 115:2342-2346, 1984.

*107. Valentin A, Eilon G, Saez S, Mundy GR: Estrogens and anti-estrogens stimulate release of bone resorbing activity by cultured human breast cancer cells. J Clin Invest 75:726-731, 1985.

*108. Ibbotson KJ, D'Souza SM, Smith DD, Carpenter G, Mundy GR: EGF receptor antiserum inhibits bone resorbing activity produced by a rat Leydig cell tumor associated with the humoral hypercalcemia of malignancy. Endocrinology 116:469-471, 1985.

109. Mundy GR: Physiology of Bone Mineral Homeostasis. Chapter 278. In: Internal Medicine, J.H. Stein, (ed.) 2nd edition, Little Brown, pp. 1818-1824, 1987.

110. Mundy GR: Diagnostic Approach to Bone and Mineral Disorders. Chapter 281. In: Internal Medicine, J.H. Stein, (ed.) 2nd edition, Little Brown, pp. 1855-1860, 1987.

111. Mundy GR: Osteopetrosis. Chapter 315. In: Internal Medicine, J.H. Stein, (ed.) 2nd edition, Little Brown, pp. 2115-2116, 1987.

112. Mundy GR: Fibrous Dysplasia. Chapter 316. In: Internal Medicine, J.H. Stein, (ed.) 2nd edition, Little Brown, pp. 2117-2118, 1987.

113. Mundy GR: Malignant Disease and the Skeleton. Chapter 319. In: Internal Medicine, J.H. Stein, (ed.), 2nd edition, Little Brown, pp. 2128-2134, 1987.

114. Martin TJ, Mundy GR: Hypercalcemia and Calcium Regulating Hormones in Malignancy. In: Clinical Endocrinology of Calcium Metabolism, Marcel Dekker, Inc., New York, pp 171-199, 1987.

*115. Gutierrez GE, Mundy GR, Katz MS: Alterations in hormone-sensitive adenylate cyclase of cloned rat osteosarcoma cells during long term culture. J Bone Miner Res 1:319-326, 1986.

116. Mundy GR: The hypercalcemia of malignancy. In: Metabolic Bone Disease and Clinical Related Disorders, 2nd Edition, Avioli LV, Krane SM (eds), Chapter 21, pp. 793-803, 1990.

*117. Mundy GR, Ibbotson KJ, D'Souza SM: Tumor products and the hypercalcemia of malignancy. J Clin Invest 76:391-395, 1985.

*118. Ibbotson KJ, Twardzik DR, D'Souza SM, Hargreaves WR, Todaro GJ, Mundy GR: Stimulation of bone resorption in vitro by synthetic transforming growth factor-alpha. Science 228:1007-1009, 1985.

*119. Gowen M, Wood DD, Mundy GR, Russell RGG: Studies on the actions of interleukin-1 on bone metabolism: IL-1 stimulation of bone cell proliferation, and inhibition of IL-1-induced bone resorption by interferon gamma. Brit J Rheum 24:147-149, 1985.

120. Mundy GR: Pathogenesis of hypercalcemia of malignancy. Clin Endo 23:705-714, 1985.

121. Mundy GR, Roodman GD: Osteoclast ontogeny and function. In: Bone and Mineral Research V, Elsevier, Peck WA (ed)., Chapter 5, pp. 209-280, 1987.

*122. Simpson EL, Harrod J, Eilon G, Jacobs JW, Mundy GR: Identification of a mRNA fraction in human prostatic cancer cells coding for a novel osteoblast stimulating factor. Endocrinology 117:1615-1620, 1985.

123. Mundy GR, Ibbotson KJ, D'Souza SM, Bertolini DR: Growth factors and bone resorption. In: Endocrine Control of Bone and Calcium Metabolism. Cohn DV, Potts JT, Fujita T, (eds), Volume 8B, Elsevier Science Publishers, pp. 30-33, 1984.

124. Roodman GD, Ibbotson KJ, MacDonald BR, Kuehl TJ, Mundy GR: 1,25(OH)2 vitamin D3 causes formation of multinucleated cells with osteoclast characteristics in cultures of primate marrow. Proc Natl Acad Sci 82:8213-8217, 1985.

125. Mundy GR, Bertolini DR: Bone destruction and hypercalcemia in plasma cell myeloma. Seminars in Oncology 13:291-299, 1986.

126. Reasner C, Mundy GR: Management of hypercalcemia. J Intensive Care Medicine 1:319-328, 1986.

*127. MacDonald BR, Mundy GR, Clark S, Wang EA, Kuehl TJ, Stanley ER, Roodman GD: Effects of human recombinant CSF-GM and highly purified CSF-1 on the formation of multinucleated cells with osteoclast characteristics in long term bone marrow cultures. J Bone Miner Res 1:227-233, 1986.

*128. Bertolini DR, Nedwin GE, Bringman TS, Smith DD, Mundy GR: Stimulation of bone resorption and inhibition of bone formation in vitro by human tumour necrosis factors. Nature 319:516-518, 1986.

*129. Ibbotson KJ, Harrod J, Gowen M, D'Souza S, Smith DD, Winkler ME, Derynck R, Mundy GR: Human recombinant transforming growth factor alpha stimulates bone resorption and inhibits formation in vitro. Proc Natl Acad Sci 83:2228-2232, 1986.

*130. Gowen M, Mundy GR: Actions of recombinant interleukin-1, interleukin-2 and interferon gamma on bone resorption in vitro. J Immunology 136:2478-2482, 1986.

131. Fetchick DA, Mundy GR: Hypercalcemia of malignancy: Diagnosis and therapy. Comprehensive Therapy 12:27-32, 1986.

132. Mundy GR: Calcitonin and 1,25D dihydroxyvitamin D in the treatment of osteoporosis. J Musculoskeletal Med 3:13-20, 1986.

*133. D'Souza SM, MacIntyre I, Girgis SI, Mundy GR: Human synthetic calcitonin-gene related peptide inhibits bone resorption in vitro. Endocrinology 119:58-61, 1986.

*134. Mundy GR: The hypercalcemia of malignancy. Kidney International 31:142-155, 1987.

*135. Fetchick DA, Bertolini DR, Sarin PS, Weintraub ST, Mundy GR, Dunn JD: Production of 1,25-dihydroxyvitamin D by human T-cell lymphotrophic virus-I transformed lymphocytes. J Clin Invest 78:592-596, 1986.

136. Ibbotson KJ, D'Souza SM, Mundy GR: Transforming growth factors and bone. Presented at the Development and Diseases of Cartilage and Bone Matrix. UCLA Symposium on Molecular and Cellular Biology. New Series, Vol 46, edited by A. Sen and T. Thornhill, Alan Liss, New York.

*137. Thomson BM, Mundy GR, Chambers TJ: Tumor necrosis factors alpha and beta induce osteoblastic cells to stimulate osteoclastic bone resorption. J Immunol 138:775-779, 1987.

*138. Takahashi N, MacDonald BR, Hon J, Winkler ME, Derynck R, Mundy GR, Roodman GD: Recombinant human transforming growth factor alpha stimulates the formation of osteoclast-like cells in long term human marrow cultures. J Clin Invest 78:894-898, 1986.

*139. Takahashi N, Mundy GR, Roodman GD: Recombinant human interferon-γ inhibits formation of human osteoclast-like cells. J Immunol 137:3544-3549, 1986.

140. Mundy GR: Ectopic hormonal syndromes in neoplastic disease. Hospital Practice 22:179-196, 1987.

*141. Gowen M, Nedwin G, Mundy GR: Preferential inhibition of cytokine stimulated bone resorption by recombinant interferon gamma. J Bone Miner Res 1:469-474, 1986.

*142. Pfeilschifter J, Mundy GR: Modulation of transforming growth factor beta activity in bone cultures by osteotropic hormones. Proc Natl Acad Sci 84:2024-2028, 1987.

*143. Pfeilschifter J, D'Souza SM, Mundy GR: Effects of transforming growth factor beta on osteoblastic osteosarcoma cells. Endocrinology 121:212-218, 1987.

*144. Smith D, Gowen M, Mundy GR: Effects of interferon gamma and other cytokines on collagen synthesis in fetal rat bone cultures. Endocrinology 120:2494-2499, 1987.

*145. Boyde A, Maconnachie E, Reid SA, Delling G, Mundy GR: Scanning electron microscopy in bone pathology: Review of methods. Potential and applications. Scanning Electron Microscopy IV:1537-1554, 1986.

146. Mundy G: Calcium homeostasis - The new horizons. In: Ionized Calcium: Its Determination and Clinical Usefulness, Proceedings of an International Symposium, Galveston, Texas. Edited by RF Moran, pp. 1-5, 1986.

147. Mundy GR: Metabolic bone disease. Trans Assoc Life Insur Med Dir Am 67:69-78, 1985.

*148. MacDonald BR, Takahashi N, McManus LM, Holahan J, Mundy GR, Roodman GD: Formation of multinucleated cells that respond to osteotropic hormones in long term human bone marrow cultures. Endocrinology 120:2326-2333, 1987.

*149. Gutierrez GE, Mundy GR, Derynck R, Hewlett KL, Katz MS: Inhibition of parathyroid hormone-responsive adenylate cyclase in clonal osteoblast-like cells by transforming growth factor alpha and epidermal growth factor. J Biol Chem 262:15845-15850, 1987.

*150. Garrett IR, Durie BGM, Nedwin GE, Gillespie A, Bringman T, Sabatini M, Bertolini DR, Mundy GR: Production of lymphotoxin, a bone-resorbing cytokine, by cultured human myeloma cells. N Engl J Med 317:526-532, 1987.

151. Mundy GR: Tumor products and the hypercalcemia of malignancy. Rev Med Brux 8:353-357, 1987.

152. Mundy GR: Osteopenia. Disease A Month, October 1987.

153. Mundy GR: Malignant hypercalcemia. In: Recent Advances in Endocrinology and Metabolism. CRW Edwards, Lincoln DW (eds). Churchill Livingstone, Chapt. 8, pp 195-213, 1989.

*154. Takahashi N, Mundy GR, Kuehl TJ, Roodman GD: Osteoclast like formation in fetal and newborn long term baboon marrow cultures is more sensitive to 1,25-dihydroxyvitamin D_3 than adult long term marrow cultures. J Bone Miner Res 2:311-317, 1987.

155. Mundy GR: Bone resorption and turnover and health and disease. Bone 8:S9-S16, 1987.

*156. Yates AJP, Gutierrez GE, Smolens P, Travis PS, Katz MS, Aufdemorte TB, Boyce BF, Hymer TK, Poser JW, Mundy GR: Effects of a synthetic peptide of a parathyroid hormone-related protein on calcium homeostasis, renal tubular calcium reabsorption and bone metabolism. J Clin Invest 81:932-938, 1988.

157. Mundy GR: Treatment options for hypercalcemia of malignancy. Hospital Therapy 13:52-65, 1988.

*158. Pfeilschifter JP, Seyedin S, Mundy GR: Transforming growth factor β inhibits bone resorption in fetal rat long bone cultures. J Clin Invest 82:680-685, 1988.

*159. Sabatini M, Boyce B, Aufdemorte T, Bonewald L, Mundy GR: Infusions of recombinant human interleukin-1α and β cause hypercalcemia in normal mice. Proc Natl Acad Sci 85:5235-5239, 1988.

*160. Pizurki L, Rizzoli R, Caverzasio J, Mundy G, Bonjour JP: Factor derived from human lung carcinoma associated with hypercalcemia mimics the effects of parathyroid hormone on phosphate transport in cultured renal epithelia. J Bone Miner Res 3:233-239, 1988.

*161. Mundy GR: Hypercalcemia of malignancy revisited. J Clin Invest 82:1-6, 1988.

*162. Chenu C, Pfeilschifter J, Mundy GR, Roodman GD: Transforming growth factor β inhibits formation of osteoclast-like cells in long-term human marrow cultures. Proc Natl Acad Sci 85:5683-5687, 1988.

163. Mundy GR, Bonewald LF, Roodman GD, Chenu C, Oreffo R, Pfeilschifter J: TGFβ and bone remodeling. Proceedings from the 8th International Congress of Endocrinology, Kyoto, Japan, Elsevier, Amsterdam, 1988.

164. Mundy GR: Cytokines and Osteoclasts. Presented at the International Symposium on Calcium Regulating Systems - VIth Fuji Hormone Conference. Japan, 1988.

165. Mundy GR: Local factors in bone remodeling. Recent Progress in Hormone Research 45:507-531, 1989.

166. Mundy GR: Disorders of serum minerals: Hypercalcemia in hematologic malignancies and in solid tumors associated with extensive localized bone destruction. In: Primer on the Metabolic Bone Disease and Disorder of Mineral Metabolism. Favus MJ (Ed.). Chapt. 31, pp 115-120, 1990.

167. Mundy GR: Anatomy, physiology and function of bone: Bone resorbing cells. In: Primer on the Metabolic Bone Disease and Disorder of Mineral Metabolism. Favus MJ (Ed.). Chapt. 5, pp 18-22, 1990.

168. Mundy GR: Anatomy, Physiology and function of Bone. Current Concepts Series, Upjohn Company, pp 1-52, 1989.

169. Mundy GR: Hypercalcemia of malignancy. In: Clinical Oncology. Weiss G. (ed), Lange Medical Publications, pp. 380-384, 1993.

170. Mundy GR, Bonewald LF: The effects of immune cell products on bone. In: Macrophage-derived cell regulatory factors. Sorg C (ed), Cytokines Basel, Karger, Vol. 1, pp 38-53, 1989.

171. Pfeilschifter J, Bonewald L, Mundy GR: The Role of Growth Factors in Cartilage and Bone Metabolism. In: M. Sporn and A.B. Roberts (eds.), Handbook of Experimental Pharmacology: Peptide Growth Factors and their Receptors, Vol. 95, Springer Verlag, Heidelberg, Chapt. 33, pp 371-400, 1990.

172. Mundy GR: Miscellaneous disorders of calcium and bone metabolism. J Henry Ford Hosp 36:166-167, 1988.

173. Mundy GR: Hypercalcemic factors other than parathyroid hormone-related protein. Endocrinol Metabol Clin North Amer 18:795-896, 1989.

*174. Takahashi N, Yamana H, Yoshiki S, Roodman GD, Mundy GR, Jones SJ, Boyde A, Suda T: Osteoclast-like cell formation and its regulation by osteotropic hormones in mouse bone marrow cultures. Endocrinology 122:1373-1382, 1988.

175. Mundy GR: Physiology of Bone and Mineral Homeostasis. Chapter 321. In: Internal Medicine, J.H. Stein, (ed.) 3rd edition, Little Brown, pp 2064-2071, 1990.

176. Mundy GR: Diagnostic Approach to Bone and Mineral Disorders. Chapter 324. In: Internal Medicine, J.H. Stein, (ed.) 3rd edition, Little Brown, pp 2103-2108, 1990.

177. Mundy GR: Osteopetrosis. Chapter 357. In: Internal Medicine, J.H. Stein, (ed.) 3rd edition, Little Brown, pp 2364-2366, 1990.

178. Mundy GR: Fibrous dysplasia. Chapter 358. In: Internal Medicine, J.H. Stein, (ed.) 3rd edition, Little Brown, pp 2366-2367, 1990.

179. Mundy GR: Malignant Disease and the Skeleton. Chapter 361. In: Internal Medicine, J.H. Stein, (ed.), 3rd edition, Little Brown, pp 2379-2382, 1990.

180. Mundy GR: Calcium Homeostasis: Hypercalcemia and Hypocalcemia. M. Dunitz, London, 1989.

*181. Takahashi N, Kukita T, MacDonald BR, Bird A, Mundy GR, McManus LM, Miller M, Boyde A, Jones SJ, Roodman GD: Osteoclast-like cells form in long term human bone marrow but not in peripheral blood cultures. J Clin Invest 83:543-550, 1989.

*182. Johnson RA, Boyce BF, Mundy GR, Roodman GD: Tumors producing human TNF induce hypercalcemia and osteoclastic bone resorption in nude mice. Endocrinology 124:1424-1427, 1989.

183. Mundy GR, Reasner C: Calcium Metabolism. In: H. Jacobson, G. Striker, S. Klahr (Eds.). Principles and Practice of Nephrology, Chapter 16, pp 98-103, 1990.

184. Mundy GR, Reasner C: Hypocalcemia. In: H. Jacobson, G. Striker, S. Klahr (Eds.). Principles and Practice of Nephrology, Chapter 17, pp 104-109, 1990.

185. Mundy GR, Reasner C: Hypercalcemia. In: H. Jacobson, G. Striker, S. Klahr (Eds.). Principles and Practice of Nephrology, Chapter 18, pp 110-118, 1990.

*186. Mundy GR, Yates AJP: Recent advances in pathophysiology and treatment of hypercalcemia of malignancy. Am J Kid Dis 14:2-12, 1989.

187. Mundy GR: Miscellaneous disorders of calcium and bone metabolism. J Henry Ford Hospital, 36:166-167, 1989.

*188. Pfeilschifter J, Chenu C, Bird A, Mundy GR, Roodman GD: Interleukin-1 and tumor necrosis factor stimulate the formation of human osteoclast-like cells in vitro. J Bone Miner Res 4:113-118, 1989.

189. Mundy GR, Bonewald LF, Roodman GD, Chenu C, Oreffo ROC, Pfeilschifter J: TGF β and bone remodeling. In: H Imura, K Shizume, S Yoshida (eds.) Progress in Endocrinology, Volume 2. Excerpta Medica, New York, pp. 927-931, 1988.

190. Mundy GR: Hypercalcemia of Malignancy. In: CS Tam, JNM Heersche, TM Murray (eds.) Metabolic Bone Disease: Cellular and Tissue Mechanisms. CRC Press, Florida, pp. 145-156, 1989.

*191. Oreffo, ROC, Mundy GR, Seyedin S, Bonewald L: Activation of the bone derived latent TGF beta complex by isolated osteoclasts. Biochem Biophys Res Commun 158:817-823, 1989.

*192. Garrett IR, Mundy GR: Relationship between interleukin-1 and prostaglandins in resorbing neonatal calvariae. J Bone Miner Res 4:789-794, 1989.

*193. Boyce BF, Aufdemorte TB, Garrett IR, Yates AJP, Mundy GR: Effects of interleukin-1 on bone turnover in normal mice. Endocrinology 125:1142-1150, 1989.

*194. Reasner CA, Dunn JF, Fetchick DA, Liel Y, Hollis BW, Epstein S, Shary J, Mundy GR, Bell NH: Alteration of vitamin D metabolism in Mexican Americans. J Bone Miner Res 5:13-17, 1990.

195. Mundy GR, Roodman GD, Yoneda T, Bonewald L, Oreffo R: Growth regulatory factors and bone cell function. In: Calcium Regulation and Bone Metabolism. Basic and clinical aspects. Cohn DV, Glorieux FH, Martin TJ (eds), Volume 10, Excerpta Medica, Amsterdam, pp. 257-269, 1990.

196. Mundy GR. Bonewald, LF: Role of TGF β in bone remodeling. Ann New York Acad Sci 593:91-97, 1990.

197. Mundy GR, Roodman GD, Bonewald LF, Yoneda T, Sabatini M: Effects of TNF and lymphotoxin on bone cells. In: Tumor Necrosis Factors: Structure, Function, and Mechanisms of Action. Aggarwal BB, Vilcek J (eds), Marcel Dekker, New York, Chapt. 21, pp. 483-498, 1991.

198. Mundy GR, Roodman GD, Bonewald LF, Oreffo ROC, Boyce BF: Assays for bone resorption and bone formation. In: Methods in Enzymology: Peptide Growth Factors, Part C, Section VII: Techniques for Study of Growth Factor Activity. Barnes D, Mather JP, Sato GH (eds), Academic Press, Inc., New York, Vol. 198, Chapt. 47, pp. 502-510, 1991.

199. Gutierrez G, Poser JW, Katz, MS, Yates AJP, Henry H, Mundy GR: Mechanisms of hypercalcemia of malignancy. Ballieres Clin Endocrinol Metab 4:119-138, 1990.

200. Reasner CA, Yates AJP, Mundy GR: Parathyroid gland disease and hypercalcemia. Curr Opin Rheumatol 2:20-25, 1990.

201. Mundy GR, Yates AJP, Reasner CA: Hypercalcemia of malignancy. In: Encyclopedia of Human Biology, Vol. 4, pp. 275-282, 1991.

202. Mundy GR: Pathophysiological aspects of tumour-induced hypercalcaemia and bone metastases. In: Disodium pamidronate (APD) in the treatment of malignancy-related disorders. Burckhardt P (ed), Hans Huber Publishers, pp 12-20, 1989.

*203. Mundy GR: Identifying mechanisms for increasing bone mass. J NIH Res 1:65-68, 1989.

*204. Boyce BF, Yates AJP, Mundy GR: Bolus injections of recombinant human interleukin-1 cause transient hypocalcemia in normal mice. Endocrinology 125:2780-2783, 1989.

205. Reasner CA, Mundy CR: Diagnosis and treatment of osteoporosis. Comprehensive Therapy 17:14-19, 1991.

*206. Graves DT, Valentin-Opran A, Delgado R, Valente AJ, Mundy GR, Piche J: The potential role of platelet-derived growth factors as an autocrine or paracrine factor for human bone cells. Conn Tiss Res 23:209-218, 1989.

207. Bonewald LF, Mundy GR: Role of transforming growth factor beta on bone remodeling: A review. Conn Tiss Res 19:201-208, 1989.

208. Mundy GR: Incidence and pathophysiology of hypercalcemia. In: Symposium: New Approaches of the Diagnosis and Treatment of Hypercalcemia. Calcif Tiss International 46:S3-S10, 1990.

209. Bonewald LF, Mundy GR: Role of transforming growth factor beta in bone remodeling. Clin Orthopaedics & Related Res 250:261-276, 1990.

*210. Pfeilschifter J, Bonewald L, Mundy GR: Characterization of the latent transforming growth factor β complex in bone. J Bone Miner Res 5:49-58, 1990.

211. Mundy GR: Commentary on "Management of hypercalcemia in breast cancer" by Richard Theriault, DO. Oncology 4:50, 1990.

*212. Garrett IR, Boyce BF, Oreffo ROC, Bonewald L, Poser J, Mundy GR: Oxygen-derived free radicals stimulate osteoclastic bone resorption in rodent bone in vitro and in vivo. J Clin Invest 85:632-639, 1990.

213. Pfeilschifter J, Mundy GR: TGF β stimulates osteoblast activity and is released during the bone resorption process. In: Calcium Regulation and Bone Metabolism: Basic and clinical aspects. Cohn DV, Martin TJ, Meunier PJ (eds), Volume 9, Elsevier Science Publishers, pp. 450-454, 1987.

*214. Kukita A, Bonewald L, Rosen D, Seyedin S, Mundy GR, Roodman GD: Osteoinductive factor (OIF) inhibits formation of human osteoclast-like cells. Proc Natl Acad Sci USA 87:3023-3026, 1990.

*215. Kukita A, Chenu C, McManus LM, Mundy GR, Roodman GD: Atypical multinucleated cells form in long term marrow cultures from patients with Paget's disease. J Clin Invest 85:1280-1286, 1990.

*216. Pfeilschifter J, Wolf O, Naumann A, Minne HW, Mundy GR, Ziegler R: Chemotactic response of osteoblast-like cells to transforming growth factor β. J Bone Miner Res 5:825-830, 1990.

217. Wo Z, Bonewald LF, Oreffo ROC, Chirgwin JM, Capony F, Rochefort H, Mundy GR: The potential role of procathepsin D secreted by breast cancer cells in bone resorption. In: Calcium Regulation and Bone Metabolism. Basic and clinical aspects. Cohn DV, Glorieux FH, Martin TJ (eds), Volume 10, Excerpta Medica, Amsterdam, pp. 304-310, 1990.

218. Kukita A, Chenu C, McManus L, Mundy GR, Roodman GD: Abnormal osteoclast-like cells form in Pagetic marrow cultures. In: Calcium Regulation and Bone Metabolism. Basic and clinical aspects. Cohn DV, Glorieux FH, Martin TJ (eds), Volume 10, Excerpta Medica, Amsterdam, pp. 430-433, 1990.

219. Mundy GR: Immune system and bone remodeling. Trends in Endocrinol & Metab 1:307-311, 1990.

*220. Sabatini M, Yates AJ, Garrett R, Chavez J, Dunn J, Bonewald L, Mundy GR: Increased production of tumor necrosis factor by normal immune cells in a model of the humoral hypercalcemia of malignancy. Lab Invest 63:676-682, 1990.

*221. Sabatini M, Chavez J, Mundy GR, Bonewald LF: Stimulation of tumor necrosis factor release from monocytic cells by the A375 human melanoma via granulocyte-macrophage colony stimulating factor. Cancer Res 50:2673-2678, 1990.

*222. Oreffo ROC, Bonewald L, Kukita A, Garrett IR, Seyedin SM, Rosen D, Mundy GR: Inhibitory effects of the bone-derived growth factors osteoinductive factor and transforming growth factor β on isolated osteoclasts. Endocrinology 126:3069-3075, 1990.

*223. Yates AJP, Gutierrez G, Garrett IR, Mencel JJ, Schreiber AB, Mundy GR: A non-cyclical analogue of salmon calcitonin (Na-propDi-Ala^{1,7}, des-Len^{19} sCT) retains full potency without including anorexia in rats. Endocrinology 126:2845-2849, 1990.

224. Chenu C, Kukita T, Mundy GR, Roodman GD: Prostaglandins E_2 inhibits formation of osteoclast-like cells in long-term human marrow cultures but is not a mediator of the inhibitory effects of transforming growth factor β. J Bone Miner Res 5:677-681, 1990.

225. Mundy GR: Calcium Homeostasis: Hypercalcemia and Hypocalcemia, 2nd Edition. Martin Dunitz,

London, 1990.

*226. Gutierrez GE, Mundy GR, Manning DR, Hewlett EL, Katz MS: Transforming growth factor β enhances parathyroid hormone stimulation of adenylate cyclase in clonal osteoblast-like cells. J Cell Physiol 144:438-447, 1990.

227. Mundy GR: Mononuclear Phagocytes in Bone Cell Function. In: Mononuclear Phagocytes Cell Biology. Lopez-Berestein G, Klostergaard J (eds), CRC Press, Inc., Chapt. 5, pp 101-117, 1992.

228. Mundy GR, Bonewald LF: Transforming Growth Factor β. In: Cytokines and Bone Metabolism. Russell RG and Gowen M (eds). CRC Press, Inc., Chapt. 3, pp 93-107, 1992.

229. Mundy GR: The effects of TGF β on bone. In: Clinical Applications of TGF β. Ciba Foundation Symposium 157:137-151, 1991.

230. Black K, Reasner C, Mundy GR: Endocrine paraneoplastic syndromes. In: Current Diagnosis 8. Conn RB (ed). W.B. Saunders Co., Philadelphia, pp. 881-885, 1991.

231. Mundy GR: Bone cell function. In: Effects of NSAIDSs on Bone and Joint Disease: New Insights 81-84, 1990.

232. Mundy GR: Pathophysiology of cancer-associated hypercalcemia. Seminars in Oncology 17:10-16, 1990.

233. Mundy GR: Presentation of the Founder's Medal of the Southern Society for Clinical Investigation to Dr. Jay H. Stein. Am J Med Sci 299:372-373, 1990.

234. Mundy GR: Current approaches to treatment of hypercalcemia of malignancy. In: International Consensus of Supportive Care in Oncology 3:6-8, 1990.

235. Mundy GR: Mechanisms of osteolysis and hypercalcemia in breast cancer. In: Medical Management of Breast Cancer. Powles TJ, Smith IE (eds), Martin Dunitz Publishers, Chapter 4, pp. 27-38, 1991.

236. Mundy GR: Current concepts in bone biology and prospects for pharmacological intervention. In: Bisphosphonates: Current Status and Future Prospects. IBC Conference, London, Russell RGG (ed), May, 1990.

237. Mundy GR: The Challenge of New Therapeutic Modalities: Osteoporosis into the 1990s - Outlook for growth factors into the 1990s. In: Osteoporosis 1990. Christiansen C, Overgaard K (eds), Volume 3, pp. 1953-1957, 1990.

238. Mundy GR: Hypercalcemia associated with malignant tumors. In: Endocrine Tumors. Mazzaferri E, Samaan N (eds), Blackwell Scientific Publications, London, England, Chapt. 36, pp. 567-691, 1993.

239. Mundy GR: Effects of TNF on bone and cartilage. In: Tumor Necrosis Factors: The Molecules and Their Emerging Role in Medicine. Beutler B (ed), Raven Press, New York, Chapt. 8, pp. 107-116, 1992.

240. Mundy GR: Cytokines and bone remodeling. In: Clinical Applications of Cytokines: Role in Pathogenesis, Diagnosis and Therapy. Oppenheim JJ, Gearing AJ, Rossi JL (eds), Oxford University Press, New York, NY, Chapt. 44, pp. 347-356, 1993.

241. Mundy GR: Cytokines and bone remodeling. J Bone Miner Metab 9:34-38, 1991.

242. Mundy GR: Inflammatory mediators and the destruction of bone. J Period Res 26:213-217, 1991.

*243. Marcelli C, Yates AJP, Mundy GR: In vivo effects of human recombinant transforming growth factor beta on bone turnover in normal mice. J Bone Miner Res 5:1087-1096, 1990.

244. Mundy GR: Pathophysiology of Hypercalcemia of Malignancy. In: Endocrine and Non-endocrine Hormone-Producing Tumors. Proceedings of 33rd Annual Clinical Conference- M.D. Anderson Cancer Center, November 1989.

245. Yoneda T, Mundy GR, Roodman GD: Induction of differentiation of the human promyelocytic HL-60 cells into cells with the osteoclastic phenotype. In: Calcium Regulation and Bone Metabolism. Basic and clinical aspects. Cohn DV, Glorieux FH, Martin TJ (eds), Volume 10, Excerpta Medica, Amsterdam, pp. 425-429, 1990.

246. Mundy G: Regulation of bone growth and remodeling: Regulation of bone resorption. In: Osteoporosis 1990. Christiansen C, Overgaard K (eds), Volume 1, pp. 248-252, 1990.

247. Mundy G: Mechanisms of osteolytic bone destruction. Bone 12 (Suppl 1):S1-S6, 1991.

*248. Flescher E, Garrett IR, Mundy GR, Talal N: Induction of bone resorbing activity by normal or rheumatoid arthritis T cells. Clin Immuno Immunopathol 56:210-218, 1990.

*249. Yates AJP, Oreffo ROC, Mayor K, Mundy GR: Inhibition of bone resorption by inorganic phosphate is mediated both by reduced osteoclast formation and by impaired activity of mature osteoclasts. J Bone Miner Res 6:473-478, 1991.

250. Reasner C, Mundy GR: The pathogenesis of hypercalcemia of malignancy. Oncology Update 7-9, 1991 (Winter 1990/1991).

*251. Yoneda T, Alsina MM, Chavez JB, Bonewald L, Nishimura R, Mundy GR: Evidence that tumor necrosis factor plays a pathogenetic role in the paraneoplastic syndromes of cachexia, hypercalcemia, and leukocytosis in a human tumor in nude mice. J Clin Invest 87:977-985, 1991.

*252. Yoneda Y, Aufdemorte TB, Nishimura R, Nishikawa N, Sakuda M, Alsina MM, Chavez JB, Mundy GR: Occurrence of hypercalcemia and leukocytosis with cachexia in a human squamous cell carcinoma of the maxilla in athymic nude mice. A novel experimental model of three concomitant paraneoplastic syndromes. J Clin Oncol 9:468-477, 1991.

*253. Yoneda T, Takaoka Y, Alsina MM, Garcia J, Mundy GR: Porcine pancreas extract decreases blood ionized calcium in mice and inhibits osteoclast formation and bone resorption in culture. FEBS Lett 278:171-174, 1991.

*254. Yoneda T, Alsina MM, Watatani K, Bellot F, Schlessinger J, Mundy GR: Dependence of a human squamous carcinoma and associated paraneoplastic syndromes on ambient epidermal growth factor concentrations and its receptors in nude mice. Cancer Res 51:2438-2443, 1991.

255. Mundy GR: Ectopic production of calciotropic peptides. In: Endocrine Manifestations of Non-Endocrine Diseases. Endocrinol Metab Clin N Amer. Daughaday WH (ed). W.B. Saunders Co., Philadelphia, Volume 20, pp. 473-487, 1991.

256. Mundy GR: Local factors regulating osteoclast function. In: The Biology and Physiology of the Osteoclast. Rifkin BR, Gay CV (eds), CRC Press, Chapt. 8, pp. 171-185, 1992.

257. Mundy G: Is prolonged stimulation of bone growth a therapeutic possibility? Mol Cell Endocrinol 75:C19-C25, 1991.

258. Mundy GR: New concepts in bone metabolism: Clinical implications. Hosp Pract 26 (Suppl 1):7-12, 1991.

259. Mundy GR: Cytokines of Bone. In: Physiology and Pharmacology of Bone. Handbook of Experimental Pharmacology. Mundy GR, Martin TJ (eds), Springer, Berlin, Germany, Chapt. 5, pp. 185-214, 1993.

260. Mundy GR: Hormonal Factors Which Regulate Bone Resorption. In: Physiology and Pharmacology of Bone. Handbook of Experimental Pharmacology. Mundy GR, Martin TJ (eds), Springer, Berlin, Germany Chapt. 6, pp. 215-247, 1993.

261. Mundy GR, Martin TJ: Pathophysiology of Skeletal Complications of Cancer. In: Physiology and Pharmacology of Bone. Handbook of Experimental Pharmacology. Mundy GR, Martin TJ (eds), Springer, Berlin, Germany Chapt. 18, pp. 641-671, 1993.

262. Mundy GR: Bone Agents. In: Rheumatology: Management of Rheumatic Diseases, Klippel JH, Dieppe PA (eds) Brooks PM, Gerber LH (section eds), Mosby-Year Book Europe Limited, London, Section 8, Chapt. 17, pp. 17.1-17.6, 1994.

*263. Black K, Garrett IR, Mundy GR: Chinese hamster ovarian cells transfected with the murine interleukin-6 gene cause hypercalcemia as well as cachexia, leukocytosis and thrombocytosis in tumor-bearing nude mice. Endocrinology 128:2657-2659, 1991.

*264. Tuttle KR, Kunau RT, Loveridge N, Mundy GR: Altered renal calcium handling in hypercalcemia of malignancy. J Amer Soc Nephrol 2:191-199, 1991.

*265. Bonewald LF, Wakefield L, Oreffo ROC, Escobedo A, Twardzik DR, Mundy, GR: Latent forms of transforming growth factor β derived from bone cultures: Identification of a naturally occurring 100 kDa complex with similarity to recombinant latent TGF β. Mol Endocrinol 5:741-751, 1991.

266. Mundy GR: Can the triple threat survive biotech? Presidential Address Am J Med Sci 302:38-41, 1991.

*267. Yoneda T, Alsina MM, Garcia JL, Mundy GR: Differentiation of HL-60 cells into cells with the osteoclast phenotype. Endocrinology 129:683-689, 1991.

*268. Yoneda T, Lyall RM, Alsina MM, Persons PE, Spada AP, Levitzki A, Zilberstein A, Mundy GR: The antiproliferative effects of tyrosine kinase inhibitor tryphostin on a human squamous cell carcinoma in vitro and in nude mice. Cancer Res 51:4430-4435, 1991.

269. Mundy GR: The Musculoskeletal System. C. Bone. Primer on Rheumatic Diseases, Schumacher HR, Klippel J, Koppman W (eds), Arthritis Foundation, Atlanta, GA, 10th edition, pp. 11-14, 1993

270. Mundy GR, Harris SE, Sabatini M, Gutierrez G, Garrett, IR, Izbicka E: The use of osteosarcoma cells to characterize factors which regulate bone cell function. In: Frontiers of Osteosarcoma Research. Novak JF, McMaster JH (eds), Hogrefe & Huber Publishers, Seattle, WA, pp 449-456, 1993.

271. Mundy GR: Calcium and common endocrine bone disorders. In: Clinical Endocrinology 2E. Besser M, Thorner, M (eds), Gower Medical Publishing, Ciba, Chapt. 18, pp. 18.1-18.16, 1994.

272. Windeler AS, Bonewald LF, Khara AG, Boyan BD, Mundy GR: The influence of sputtered bone substitutes on cell growth and phenotypic expression. In: The Bone-Biomaterial Interface. Davise JE (ed), University of Toronto Press, pp 205-213, 1991.

273. Mundy GR: Future therapies for osteoporosis. In: Comprehensive Management of Menopause. Lorrain J, Plouffe L, Ravnikar V, Speroff L, Watts N (eds), Springer-Verlag, Chapt. 40, pp 425-433, 1993.

*274. Reddy KB, Mangold GL, Tandon AK, Yoneda T, Mundy GR, Zilberstein A, Osborne CK: Inhibition of breast cancer cell growth in vitro by a tyrosine kinase inhibitor. Cancer Res 52:3636-3641, 1992.

275. Mundy GR: Factores locales en el control de la reabsorción y formación de hueso. In: Actualizaciones en Metabolismo Oseo: Aspectos bàsicos sobre metaboismo óseo. (Presented at the Spanish Society of Bone and Mineral Meeting in Oviedo, Spain, September 1991), Cannata Andía JB (ed), Jarpyo Editores, Madrid, Spain, pp 41-46, 1992.

276. Mundy GR: Mechanisms of bone disease in multiple myeloma. In: Monoclonal Gammapathies III - Clinical Significance and Basic Mechanisms, Radl J, Van Camp B (eds). Proceedings of the Third EURAGE Symposium, Brussels, pp 51-56, 1991.

*277. Yates AJP, Favarato G, Aufdemorte TB, Marcelli C, Kester MB, Walker R, Langton BC, Bonewald L, Mundy GR: Expression of human transforming growth factor β by Chinese hamster ovarian tumors in nude mice causes hypercalcemia and increase osteoclastic bone resorption. J Bone Miner Res 7:847-853, 1992.

278. Mundy GR, Reasner CA: Physiology of Bone and Mineral Homeostasis. In: Internal Medicine, J.H. Stein, (ed.) 4th edition, Mosby Publishers, Chapt. 148, pp. 1214-1222, 1994.

279. Mundy GR, Reasner CA: Diagnostic Approach to Bone and Mineral Disorders. In: Internal Medicine, J.H. Stein, (ed.) 4th edition, Mosby Publishers, Chapt. 151, pp. 1254-1260, 1994.

280. Mundy GR, Reasner CA: Osteopetrosis. In: Internal Medicine, J.H. Stein, (ed.) 4th edition, Mosby Publishers, Chapt. 184, pp. 1532-1534, 1994.

281. Mundy GR, Reasner CA: Fibrous dysplasia. In: Internal Medicine, J.H. Stein, (ed.) 4th edition, Mosby Publishers, Chapt. 185, pp. 1534-1536, 1994.

282. Mundy GR, Reasner CA: Malignant Disease and the Skeleton. In: Internal Medicine, J.H. Stein, (ed.), 4th edition, Mosby Publishers, Chapt. 188, pp. 1548-1552, 1994.

283. Mundy GR: Future strategies for the treatment of osteoporosis. In: Osteoporosis. Stevenson JC, Lindsay R (eds.), Chapman and Hall Publishers, Chapter 19, pp. 365-376, 1998.

284. Gutierrez G, Mundy GR: Cytokines of bone. In: Revista Española de Enfermedades Metabolicas Oseas, Rapado A (ed), Vol 1 (4):100-103, 1992.

285. Mundy GR: Factors which stimulate bone growth in vivo. Growth Regulation 3:124-128, 1993.

286. Mundy GR: Cytokines and local factors which affect osteoclast function. Int J Cell Cloning 10:215-222, 1992.

*287. Guise TA, Chirgwin JM, Favarato G, Boyce BF, Mundy GR: Chinese hamster ovarian cells transfected with human parathyroid hormone-related protein cDNA cause hypercalcemia in nude mice. Lab Invest 67:477-485, 1992.

287. Mundy GR: Visions for the future in osteoporosis research. Osteoporosis Int 3 (Suppl. 2):S29-S34, 1993.

289. Mundy GR: Cytokines and growth factors in the regulation of bone remodeling. J Bone Miner Res 8 (Suppl. 2):S505-S510, 1993.

290. Black KS, Mundy GR: Other causes of hypercalcemia; local and ectopic secretion syndromes. In: The Parathyroids: Basic & Clinical Concepts, Bilezikian JP, Marcus R, Levine MA (eds), Raven Press, Chapt. 21, pp 341-357, 1994.

*291. Samuels MH, Veldhuis J, Cawley C, Urban RJ, Luther M, Bauer R, Mundy G: Pulsatile secretion of parathyroid hormone in normal young subjects: Assessment by deconvolution analysis. J Clin Endo Metab 77:399-403, 1993.

*292. Boyce BF, Yoneda T, Lowe C, Soriano P, Mundy GR: Requirement of $pp60^{c\text{-}src}$ expression of osteoclasts to form ruffled borders and resorb bone. J Clin Invest 90:1622-1627, 1992.

*293. Nakai M, Mundy GR, Williams PJ, Boyce B, Yoneda T: A synthetic antagonist to laminin inhibits the formation of osteolytic metastases by human melanoma cells in nude mice. Cancer Res 52:5395-5399, 1992.

294. Mundy GR: Disorders of serum minerals: Hypercalcemia in hematologic malignancies and in solid tumors associated with extensive localized bone destruction. In: Primer on the Metabolic Bone Disease and Disorder of Mineral Metabolism. Favus MJ (Ed.), 2nd edition, Chapt. 34, Raven Press, pp 173-176, 1993.

295. Mundy GR: Anatomy, physiology and function of bone: Bone resorbing cells. In: Primer on the Metabolic Bone Disease and Disorder of Mineral Metabolism. Favus MJ (ed.). 2nd edition, Chapt. 5, Raven Press, pp 25-33, 1993.

296. Mundy GR, Reasner CA: Hypercalcemia. In: H. Jacobson, G. Striker, S. Klahr (eds.). Principles and Practice of Nephrology, 2nd edition, Chapter 142, pp 977-986, 1995.

297. Mundy GR, Reasner CA: Hypocalcemia. In: H. Jacobson, G. Striker, S. Klahr (eds.). Principles and Practice of Nephrology, 2nd edition, Chapter 141, pp 971-977, 1995.

298. Mundy GR: Basic science in osteoporosis. Osteoclast model systems. In: C. Christiansen, B. Riis, (eds). Proceedings of the Fourth International Symposium on Osteoporosis, pp. 254-257, 1993.

*299. Gallwitz WE, Mundy GR, Lee CH, Qiao M, Roodman GD, Gaskell SJ, Bonewald LF: 5-Lipoxygenase metabolites of arachidontic acid stimulate isolated osteoclasts to resorb calcified matrices. J Biol Chem 368:10087-10094, 1993.

*300. Katz MS, Gutierrez GE, Mundy GR, Hymer TK, Caulfield MP, McKee RL: Tumor necrosis factor and interleukin-1 inhibit parathyroid hormone-responsive adenylate cyclase in clonal osteoblast-like cells by down-regulating parathyroid hormone receptors. J Cell Physiol 153:206-213, 1992.

*301. Guise TA, Garrett IR, Bonewald LF, Mundy GR: The interleukin-1 receptor antagonist inhibits hypercalcemia mediated by interleukin-1. J Bone Miner Res 8:583-587, 1993.

*302. Lowe C, Yoneda T, Boyce BF, Chen H, Mundy GR, Soriano P: Osteopetrosis in src deficient mice is due to an autonomous defect of osteoclasts. Proc Natl Acad Sci USA 90:4485-4489, 1993.

303. Mundy GR: Bone remodeling and its disorders. Martin Dunitz, London, 1st Edition, 1994.

305. Mundy GR: Osteoporosis today and tomorrow. Bone growth factors for osteoporosis - A realizable dream? In: C. Christiansen, B. Riis, (eds). Proceedings of the Fourth International Symposium on Osteoporosis, pp. 414-417, 1993.

306. Mundy GR, Boyce BF, Yoneda T: Mechanisms of osteolytic bone destruction. In: Diel IJ, Kaufmann M, Bastert G (eds). Metastatic Bone Disease. Fundamental and Clinical Aspects. Springer Verlag, Heidelberg, pp. 86-92, 1993.

*307. Yoneda T, Nakai M, Moriyama K, Scott L, Ida N, Kunitomo T, Mundy GR: Neutralizing antibodies to human interleukin-6 reverse hypercalcemia associated with a human squamous carcinoma. Cancer Res 53:737-740, 1993.

*308. Yoneda T, Lowe C, Lee CH, Gutierrez G, Izbicka E. Niewolna M, Williams PJ, Mundy GR: Herbimycin A, a pp60$^{c\text{-}src}$ tyrosine kinase inhibitor, inhibits osteoclastic bone resorption in vitro and hypercalcemia in vivo. J Clin Invest 91:2791-2795, 1993.

*309. Riancho JA, Zarrabeitia MT, Mundy GR, Yoneda T, Macías JG: Effects of interleukin-4 on the formation of macrophages and osteoclast-like cells. J Bone Miner Res 8:1337-1344, 1993.

*310. Oreffo ROC, Marshall GJ, Kirchen M, Gallwitz WE, Chavez J, Mundy GR, Bonewald LF: Characterization of a cell line derived from a human giant cell tumor which stimulates osteoclastic bone resorption. Clin Orthop 296:229-241, 1993.

*311. Guise TA, Yoneda T, Yates AJ, Mundy GR: The combined effect of tumor-produced parathyroid hormone-related protein and transforming growth factor alpha enhance hypercalcemia in vivo and bone resorption in vitro. J Clin Endocrinol Metab 77:40-45, 1993.

*312. Garrett IR, Guise TA, Bonewald LF, Chizzonite R, Mundy GR: Evidence that interleukin-1 mediates its effects on bone resorption via the 80 kilodalton interleukin-1 receptor. Calcif Tissue Int 52:438-441, 1993.

*313. Boyce BF, Chen H, Soriano P, Mundy GR: Histomorphometric and immunocytochemical studies of src-related osteopetrosis. Bone 14:335-340, 1993.

*314. Reasner CA, Stone MD, Hosking DH, Mundy GR: Acute changes in calcium homeostasis during treatment of primary hyperparathyroidism with risedronate. J Clin Endocrinol Metab 77:1067-1071, 1993.

315. Mundy GR: Local control of osteoclast function. Osteoporosis Int 3 (Suppl 1):126-127, 1993.

*316. Yoneda T, Niewolna M, Lowe C, Izbicka E, Mundy GR: Hormonal regulation of $pp60^{c\text{-}src}$ expression during osteoclast formation in vitro. Mol Endocrinol 7:1313-1318, 1993.

*317. Chen D, Feng JQ, Feng M, Harris MA, Mundy G, Harris SE: Cloning and sequence of bone morphogenetic protein 4 from fetal rat calvarial cell. Biochim Biophys Acta 1174:289-292, 1993.

*318. Izbicka E, Niewolna M, Yoneda T, Lowe C, Boyce B, Mundy G: $pp60^{c\text{-}src}$ expression and activity in MG-63 osteoblastic cells is modulated by PTH, but is not required for PTH-mediated adenylate cyclase response. J Bone Miner Res 9:127-132, 1994.

319. Mundy GR: Role of Cytokines in Bone Resorption. J Cell Biochem 53:296-300, 1993.

320. Mundy GR, Roodman GD, Yoneda T: Role of cytokines in regulation of bone remodeling and osteoporosis. In: Human Cytokines: Their Role in Health and Disease. Aggarwal B, Puri R (eds)., Blackwell Scientific Publications, Inc., Chapter 17, pp 285-292, 1995.

321. Mundy GR: Peptides and growth regulatory factors in bone. In: Rheumatic Disease Clinics of North American: Osteoporosis. Dudlick B (ed), W.B. Saunders Co., pp. 577-588, 1994.

322. Mundy GR: Parathyroids and bone and mineral metabolism: editorial overview. In: Current Opinion in Endocrinology and Diabetes, Kohler PO (ed), Current Science, Philadelphia, PA, pp. 267-269, 1993.

*323. Harris SE, Sabatini M, Harris MA, Feng J, Wozney J, Mundy GR: Expression of bone morphogenetic protein messenger RNA in prolonged cultures of fetal rat calvarial cells. J Bone Miner Res 9:389-394, 1994.

*324. Dallas SL, Park-Snyder S, Miyazono K, Twardzik D, Mundy GR, Bonewald LF: Characterization and autoregulation of latent TGFβ complexes in osteoblast-like cell lines: Production of a latent complex lacking the latent TGFβ -binding protein (LTBP). J Biol Chem 269:6815-6822, 1994.

*325. Yoneda T, Kato I, Bonewald LF, Burgess WH, Mundy GR: A novel cytokine with osteoclastpoietic activity. J Periodont Res 28:521-522, 1993.

*326. Harris SE, Bonewald LF, Harris MA, Sabatini M, Dallas S, Feng J, Ghosh-Choudhury N, Wozney J, Mundy GR: Effects of TGFβ on bone nodule formation and expression of bone morphogenetic protein-2, osteocalcin, osteopontin, alkaline phosphatase and Type I collagen mRNA in prolonged

cultures of fetal rat calvarial osteoblasts. J Bone Miner Res 9:855-863, 1994.

327. Mundy GR, Yoneda T: Facilitation and suppression of bone metastasis. Clin Orthop 312:34-44, 1995.

328. Guise TA, Mundy GR: Disorders of calcium metabolism. In: Therapy of Renal Diseases and Related Disorders, 3rd Edition, Suki WN, Massry SG (eds), Kluwer Academic Publishers, Boston, MA, Chapter 5, pp. 85-114, 1997.

*329. Nishihara T, Ohsaki Y, Ueda N, Saito N, Mundy GR: Mouse interleukin-1 receptor antagonist induced by *Actinobacillus actinomycetemcomitans* lipopolysaccharide blocks the effects of interleukin-1 on bone resorption and osteoclast-like cell formation. Infect Immun 62:390-397, 1994.

330. Mundy GR: Boning up on genes. Nature 367:216-217, 1994.

331. Mundy GR: Evaluation and treatment of hypercalcemia. Hospital Practice 29:79-86, 1994.

*332. Yoneda T, Takaoka Y, Boyce BF, Scott L, Mundy GR: Extracts of porcine pancreas prevents progression of hypercalcemia and cachexia and prolong survival in nude mice bearing a human squamous carcinoma. Cancer Res 54:2509-2513, 1994.

*333. Yoneda T, Sasaki A, Mundy GR: Osteolytic bone metastasis in breast cancer. Breast Cancer Res Treat 32:73-84, 1994.

*334. Harris SE, Harris M, Mahy M, Wozney J, Feng J, Mundy GR: Expression of bone morphogenetic proteins by normal rat and human prostate and prostate cancer cells. The Prostate 24:204-211, 1994.

335. Mundy GR: Local control of bone formation by osteoblasts. Clin Orth 313:19-26, 1995.

336. Mundy GR, Boyce BF, Yoneda T, Bonewald LF, Roodman GD: Cytokines and bone remodeling. In: Osteoporosis, Marcus B, Kelsey, J, Feldman D (eds), Academic Press, New York, Chapt. 11, pp 301-313, 1996.

*337. Feng JQ, Harris MA, Ghosh-Choudhury N, Feng M, Mundy GR, Harris SE: Structure and sequence of mouse bone morphogenetic protein-2 gene (BMP-2): Comparison of the structures and promoter regions of BMP-2 and BMP-4 genes. Biochim Biophys Acta 1218:221-224, 1994.

338. Mundy GR, Yoneda T: Mechanisms of bone metastasis. In: Mechanisms and Pathophysiology of Bone Metastasis, Orr FW, Singh G (eds), R.G. Landes Company, pp. 1-16, 1996.

339. Guise TA, Mundy GR: Evaluation of hypocalcemia in children and adults. J Clin Endocrinol Metab 80:1473-1478, 1995.

340. Mundy GR: Ask Drug Therapy - A Question-and-Answer Seminar with the Drug Therapy Experts: Which drugs are now used for severe osteoporosis? Drug Therapy 24:23, 1994.

341. Ghosh-Choudhury N, Harris MA, Feng JQ, Mundy GR, Harris SE: Expression of the BMP 2 gene during bone cell differentiation. Critical Reviews in Eukaryotic Gene Expression 4:345-355, 1994.

*342. Uy HL, Dallas M, Calland JW, Boyce BF, Mundy GR, Roodman GD: Use of an in vivo model to

determine the effects of interleukin-1 on cells at different stages in the osteoclast lineage. J Bone Miner Res 10:295-301, 1995.

343. Mundy GR: New drugs for bone diseases. Drugs of Today 30:589-597, 1994.

344. Mundy GR: What role for etidronate in bone pain from prostate cancer? Cancer Consultations 1:162, 1994.

345. Mundy GR, Yates AJP, Reasner CA: Hypercalcemia of malignancy. In: Encyclopedia of Human Biology, 2nd ed., Academic Press, pp. 275-282, 1991.

*346. Chen D, Feng JQ, Feng M, Harris MA, Mahy P, Mundy GR, Harris SE: Sequence and expression of bone morphogenetic protein 3 messenger RNA in prolonged cultures of fetal rat calvarial osteoblasts and in rat prostate adenocarcinoma PAIII cells. DNA Cell Biol 14:235-239, 1995.

*347. Harris SE, Feng JQ, Harris MA, Ghosh-Choudhury N, Dallas MR, Wozney J, Mundy GR: Recombinant bone morphogenetic protein 2 accelerates bone cell differentiation and stimulates BMP 2 mRNA expression and BMP 2 promoter activity in primary fetal rat calvarial osteoblast cultures. Mol Cell Diff 3:137-155, 1995.

348. Mundy GR, Boyce B, Hughes D, Wright K, Bonewald L, Dallas S, Harris S, Ghosh-Choudhury N, Chen D, Dunstan C, Izbicka E, Yoneda T: The effects of cytokines and growth factors on osteoblastic cells. Bone 17:71S-75S, 1995.

349. Mundy GR: Regulation of bone formation by bone morphogenetic proteins and other growth factors. Clin Orth 323:24-28, 1996.

350. Mundy GR: The genetics of osteoporosis. The Endocrinologist 5:176-179, 1995.

*351. Yoneda T, Williams P, Rhine C, Boyce BF, Dunstan C, Mundy GR: Suramin suppresses hypercalcemia and osteoclastic bone resorption in nude mice bearing a human squamous cancer. Cancer Res 55:1989-1993, 1995.

*352. Mbalaviele G, Chen H, Boyce BF, Mundy GR, Yoneda T: The role of cadherin in the generation of multinucleated osteoclasts from mononuclear precursors in murine marrow. J Clin Invest 95:2757-2765, 1995.

353. Harris SE, Harris MA, Feng J, Ghosh-Choudhury N, Dallas S, LaPoint D, Wozney J, Bonewald LF, Mundy GR: Self-organizing bone cell differentiation in vitro: A system in search of the "edge of chaos". In: Thanh Vân JT, Bergé P, Conte R, Dubois M (eds), Chaos and Complexity, Editions Frontieres, Cedex, France, pp 239-245,1995.

*354. Yoneda T, Izbicka E, Feng J, Takaoka Y, Mundy GR: A novel bone/calcium metabolism-regulating factor in porcine pancreas. Osteoporosis Jap 3:52-55, 1995.

*355. Sasaki A, Boyce BF, Story B, Wright KR, Chapman M, Boyce R, Mundy GR, Yoneda T: -Bisphosphonate risedronate reduces metastatic human breast cancer burden in bone in nude mice. Cancer Res 55:3551-3557, 1995.

*356. Ghosh-Choudhury N, Windle JJ, Koop BA, Harris MA, Guerrero DL, Wozney JM, Mundy GR, Harris SE: Immortalized murine osteoblasts derived from BMP 2-T-Antigen expressing transgenic mice. Endocrinology 137:331-339, 1996.

*357. De La Mata J, Uy H, Guise TA, Story B, Boyce BF, Mundy GR, Roodman GD: IL-6 enhances hypercalcemia and bone resorption mediated by PTH-rP in vivo. J Clin Invest 95:2846-2852, 1995.

*358. Hughes DE, Wright KR, Uy HL, Sasaki A, Yoneda T, Roodman GD, Mundy GR, Boyce BF: Bisphosphonates promote apoptosis in murine osteoclasts in vitro and in vivo. J Bone Miner Res 10:1478-1487, 1995.

359. Mundy GR: Anatomy, physiology and function of bone: Bone resorbing cells. In: Primer on the Metabolic Bone Disease and Disorder of Mineral Metabolism. Favus MJ (ed.). 3rd edition, Raven Press 16-23, 1996.

360. Mundy GR: Disorders of serum minerals: Hypercalcemia in hematologic malignancies and in solid tumors associated with extensive localized bone destruction. In: Primer on the Metabolic Bone Disease and Disorder of Mineral Metabolism. Favus MJ (Ed.), 3rd edition, Raven Press 203-205, 1996

361. Mundy GR, Lane NE: Bone Agents. In: Rheumatology: Management of Rheumatic Diseases, Klippel JH, Dieppe PA (eds) Brooks PM, Gerber LH (section eds), 2nd Edition, Mosby-Year Book Europe Limited, London 38: 1-4, 1997.

362. Dequeker J, Mundy GR: Bone Structure and Function. In: Rheumatology: Management of Rheumatic Diseases, Klippel JH, Dieppe PA (eds) Brooks PM, Gerber LH (section eds), 2nd Edition, Mosby-Year Book Europe Limited, London 34:1-12, 1997.

363. Dequeker J, Mundy GR: Management of Osteoporosis. In: Rheumatology: Management of Rheumatic Diseases, Klippel JH, Dieppe PA (eds) Brooks PM, Gerber LH (section eds), 2nd Edition, Mosby-Year Book Europe Limited, London 39: 1-4, 1997.

364. Mundy GR: Future Therapies for Osteoporosis. Published in the Proceedings of the Second International Symposium on Osteoporosis, Beijing, P.R. China, 1995.

365. Mundy GR: Osteoporosis into the year 2010. Brit J Obstet Gynaecol 103 (Suppl 13):32-37, 1996.

*366. Dallas SL, Miyazono K, Skerry TM, Mundy GR, Bonewald LF: Dual role for the latent transforming growth factor beta binding protein (LTBP) in storage of latent TGF .! in the extracellular matrix and as a structural matrix protein. J Cell Biol 131:539-549, 1995.

*367. Feng JQ, Chen D, Esparza J, Harris MA, Mundy GR, Harris SE: Deer antler tissue contains two types of bone morphogenetic protein 4 mRNA transcripts. Biochim Biophys Acta 1263:163-168, 1995.

368. Guise TA, Mundy GR: Breast cancer and bone. In: Parathyroids and Bone and Mineral Metabolism, Current Opinion in Endocrinology and Diabetes 2:548-555, 1995.

369. Guise TA, Mundy GR: Bones and cancer. Endocrine Rev 14:255, 1993.

*370. Chen D, Chen H, Feng JQ, Windle JJ, Harris MA, Bonewald LF, Boyce BF, Wozney JM, Mundy GR, Harris SE: Osteoblastic cell lines derived from a transgenic mouse containing osteocalcin promoter driving SV40 T antigen. Mol Cell Diff 3:193-212, 1995.

371. Mundy GR: Role of cytokines, parathyroid hormone, growth factors in malignancy. In: Molecular Mechanisms of Metabolic Bone Diseases, Principles of Bone Biology, Bilezikian J, Raisz L, Rodan G (eds), Academic Press, San Diego, CA pp.827-836, 1996.

*372. Uy HL, Guise TA, De La Mata J, Taylor SD, Story BM, Dallas MR, Boyce BF, Mundy GR, Roodman GD. Effects of PTHrP and PTH on osteoclasts and osteoclast precursors in vivo. Endocrinology 136:3207-3212, 1995.

373. Mundy GR: Editorial Review. In: Parathyroids and Bone and Mineral Metabolism, Current Opinion in Endocrinology and Diabetes 2:539-542, 1995.

374. Mundy GR: No bones about fluoride. Nature Medicine 1:1130-1131, 1995.

*375. Feng JQ, Chen D, Cooney AJ, Tsai MJ, Harris MA, Tsai SY, Feng M, Mundy GR, Harris SE: The mouse bone morphogenetic protein-4 gene: Analysis of promoter utilization in fetal rat calvarial osteoblasts and regulation by COUP-TFI orphan receptor. J Biol Chem 270:28364-28373, 1995.

376. Mundy GR, Reasner CA: Physiology of Bone and Mineral Homeostasis. In: Internal Medicine, J.H. Stein, (ed.) 5th edition, Mosby Publishers, Chapter 283, pp. 1714-1721, 1998.

377. Mundy GR, Reasner CA: Diagnostic Approach to Bone and Mineral Disorders. In: Internal Medicine, J.H. Stein, (ed.) 5th edition, Mosby Publishers, Chapter 286, pp. 1744-1748, 1998.

378. Mundy GR, Reasner CA: Osteopetrosis. In: Internal Medicine, J.H. Stein, (ed.) 5th edition, Mosby Publishers, Chapter 319, pp. 1958-1959, 1998.

379. Mundy GR, Reasner CA: Fibrous dysplasia. In: Internal Medicine, J.H. Stein, (ed.) 5th edition, Mosby Publishers, Chapter 320, pp. 1960-1961, 1998.

380. Mundy GR, Reasner CA: Malignant Disease and the Skeleton. In: Internal Medicine, J.H. Stein, (ed.), 5th edition, Mosby Publishers, Chapter 323, pp. 1971-1974, 1998.

*381. Mundy GR: Regulatory mechanisms of osteoclast differentiation and function. J Bone Miner Metab 14:59-64, 1996.

*382. Izbicka E, Dunstan C, Esparza J, Jacobs C, Sabatini M, Mundy GR: Human amniotic tumor which induces new bone formation in vivo produces a growth regulatory activity in vitro for osteoblasts identified as an extended form of basic fibroblast growth factor (bFGF). Cancer Res 56:633-636, 1996.

383. Mundy GR: Malignancy and the skeleton. Hormone and Metabolic Res 29:120-127, 1997.

*384. Mundy GR: Editorial: An OAF by any other name. Endocrinology 137:1149-1150, 1996.

*385. Alsina M, Boyce B, Devlin RD, Anderson JL, Craig F, Mundy GR, Roodman GD: Development of

an in vivo model of human multiple myeloma bone disease. Blood 87:1495-1501, 1996.

*386. Parfitt AM, Mundy GR, Roodman GD, Hughes DE, Boyce BF: A new model for regulation of bone resorption, with particular reference to the effects of bisphosphonates. J Bone Miner Res 11:150-159, 1996.

*387. Moriyama K, Williams PJ, Niewolna M, Dallas MR, Uehara Y, Mundy GR, Yoneda T: Herbimycin A, a tyrosine kinase inhibitor, impairs hypercalcemia associated with a human squamous cancer producing interleukin-6 in nude mice. J Bone Miner Res 11:905-911, 1996.

*388. Izbicka E, Yoneda T, Takaoka Y, Horn D, Williams P, Mundy GR: Identification of a novel bone/calcium metabolism-regulating factor in porcine pancreas. J Biol Chem 271:23230-23234, 1996.

389. Guise TA, Mundy GR: Physiological and pathological roles of parathyroid hormone-related protein. Curr Opin in Nephrology 5:307-315, 1996.

*390. Garcia C, Qiao M, Gallwitz W, Mundy GR, Bonewald LF: Effects of synthetic peptido-leukotrienes on bone resorption in vitro. J Bone Miner Res 11:521-529, 1996.

391. Mundy GR: The regulatory mechanisms responsible for osteoclastic bone resorption and control of the osteoclast life cycle. Published in the 3rd International Forum on Calcified Tissue and Bone Metabolism [Bone Cell Function: Cell-Cell/Cell-Matrix Interactions]. International Bone Forum, Yokohama, Japan, pp 40-45, 1994.

392. Trippel SB, Coutts RD, Einhorn TA, Mundy GR, Rosenfeld RG: Growth factors as therapeutic agents. J Bone Joint Surg 78:1272-1286, 1996.

393. Mundy GR, Guise TA: REVIEW: Hypercalcemia of malignancy. Am J Med 103: 134-145, 1997.

394. Mundy GR: Hypercalcemia of malignancy. In: Metabolic Bone Disease, 3rd Edition, Avioli LV, Krane SM (eds) 637-649, 1997.

395. Mundy GR: Bone remodeling and mechanisms of bone loss in osteoporosis. In: Osteoporosis - State of the Art, Meunier P (ed), Martin Dunitz Publishers, London 17-35, 1997.

*396. Riancho JA, Mundy GR: The role of cytokines and growth factors as mediators of the effects of systemic hormones at the bone local level. Crit Rev Eukaryotic Gene Expression 5:193-217, 1995.

*397. Mbalaviele G, Dunstan CR, Sasaki A, Williams PJ, Mundy GR, Yoneda T: E-cadherin expression in human breast cancer cells suppress the development of osteolytic bone metastases in experimental metastasis model. Cancer Res 56: 4063-4070, 1996.

*398. Izbicka E, Dunstan CR, Horn D, Adams R, Mundy GR: Mitogeneic lectin concanavalin A induces calvarial bone formation in vivo via indomethacin-sensitive pathway. Calcif Tissue Int 60: 204-209, 1997.

*399. Guise TA, Yin JJ, Taylor SD, Yoneda T, Dallas M, Boyce BF, Kumagai Y, Mundy GR: Evidence for a causal role of parathyroid hormone-related protein in the pathogenesis of human breast cancer-mediated osteolysis. J Clin Invest 98: 1544-1549, 1996.

*400. Mundy GR: Osteoblast function and the mechanism of action of bone forming agents. Osteoporosis 1996. Proceedings of the 1996 World Congress on Osteoporosis; Amsterdam, The Netherlands, 18-23 May 1996, pp 17-28.

*401. Hughes DE, Tiffee JC, Li HH, Mundy GR, Boyce BF: Estrogen promotes apoptosis of murine osteoclasts mediated by TGFß. Nature Medicine 2, No. 10:1132-1136, 1996.

*402. Izbicka E, Dunstan CR, Horn D, Harris M, Harris S. Adams, R. Mundy GR: Effects of human tumor cell lines on local new bone formation in vivo. Calcif Tissue Int 60: 210-215, 1997.

*403. Mundy GR: Regulatory mechanisms of osteoclast differentiation and function. Osteoporosis Japan 4:39-46, 1996.

404. Mundy GR, Guise TA. Role of PTH-rP in the hypercalcemia of malignancy and osteolytic bone disease. Endocrine-Related Cancer 5:15-26, 1998.

405. Mundy GR. Mechanisms of bone metastasis. Cancer (Suppl 80/8):1546-1556, 1997.

406. Mundy GR. Myeloma bone disease. European J Cancer 34(2): 246-251, 1998.

407. Mundy GR. Foreword In: Hypercalcemia of Malignancy: Etiology, Pathogenesis and Treatment. S.J. Wimalawansa, R.G. Landes, Austin, Texas, 1995.

*408. Nishimura R, Kato Y, Chen D, Harris SE, Mundy GR, Yoneda T. Smad5 and DPC4 are key molecules in mediating BMP-2 induced osteoblastic differentiation of the pluripotent mesenchymal precursor cell line C2C12. J Biol Chem 273:1872-1879, 1998.

*409. Xu SC, Ji X, Harris MA, Mundy GR, Harris SE. A clonal chondrocytic cell line derived from BMP-2/T antigen expressing transgenic mouse. In Vitro Cell Dev Biol 34(5):359-363, 1998.

*410. Garrett IR, Dallas S , Radl J, Mundy GR. A murine model of myeloma bone disease. Bone 20: 515-520, 1997.

*411. Yoneda T, Sasaki A, Dunstan C, Williams PJ, Bauss F, DeClerck YA, Mundy GR. Inhibition of osteolytic bone metastasis of breast cancer by combined treatment with bisphosphonate and tissue inhibitor of matrix metalloproteinase-2. J Clin Invest 99: 2509-2517, 1997.

*412. Samuels MH, Veldhuis JD, Kramer P, Urban RJ, Bauer R, Mundy GR. Episodic secretion of parathyroid hormone in postmenopausal women: Assessment by deconvolution analysis and approximate entropy. J Bone Min Res 12:616-623, 1997.

*413. Kato Y, Windle JJ, Koop BA, Mundy GR, Bonewald LF. Establishment of an osteocyte-like cell line MLO-Y4. J Bone Min Res 12: 2014-2023, 1997.

*414. Uy HL, Mundy GR, Boyce BF, Story BM, Dunstan CR, Yin JJ, Roodman GD, Guise TA. Tumor necrosis factor enhances parathyroid hormone related protein (PTH-rP) - induced hypercalcemia and bone resorption without inhibiting bone formation in vivo. Cancer Research 57:3194-3199, 1997.

*415. Bonewald LF, Oreffo ROC, Lee CH, Park-Snyder S, Twardzik D, Mundy GR. Effects of retinol on

activation of latent transforming growth factor-ß by isolated osteoclasts. Endocrinology 138: 657-666, 1997.

*416. Garcia C, Boyce B, Gilles J, Dallas M, Qiao M, Mundy G, Bonewald L. Leukotriene B4 stimulates osteoclastic bone resorption both in vitro and in vivo. J Bone Min Res 11: 1619-1627, 1996.

*417. Ghosh-Choudhury N, Harris MA, Wozney J, Mundy GR, Harris SE. Clonal osteoblastic cell lines from p53 null mouse calvariae are immortalized and dependent on bone morphogenetic protein 2 for mature osteoblastic phenotype. Biochem Biophys Res Commun 231: 196-202, 1997.

*418. Feng JQ, Chen D, Ghosh-Choudhury N, Esparza J, Mundy GR, Harris SE. Bone morphogenetic protein 2 transcripts in rapidly developing deer antler tissue contain an extended 5' non-coding region arising from a distal promoter. Biochim Biophys Acta 1350: 47-52, 1997.

419. Lipton A, Mundy GR, Singer FR. Introduction to skeletal complications of malignancy. Cancer (Suppl 80/8): 1527-1528, 1997.

420. Mundy GR. "Hard Days on the Endless Frontier" Revisited. FASEB Journal 12 262, 1998.

421. De La Mata J, Mundy GR. Inflamación y osteopenia en las enfermedades reumáticas. Rev Esp Rheumatol 24: 16-22, 1997.

422. Mundy GR. Bone In: Primer on Rheumatic Diseases. 10th Edition. H.R. Schumacher, (ed). 1/-14, 1993.

423. Guise TA, Mundy GR. Disorder of Calcium Metabolism. In: The Kidney, Physiology and Pathophysiology. 3rd Edition. D. Seldin & G. Giebisch (eds). Lippincott-Raven, Philadelphia 1811-39, 1998.

424. Mundy GR. Pathology of Skeletal Metastasis. Skeletal Manifestations of Malignancy - Interactive Medical Communications. 1998 Winter pp. 1-4.

425. Mundy GR. Structure and physiology of the normal skeleton. In: Mundy GR, Rubens RD (eds). Cancer and the Skeleton. Martin Dunitz, London: 1-20, 2000.

426. Mundy GR and Oyajobi B. Pathophysiology of myeloma bone disease. In: Mundy GR, Rubens RD (eds.) Cancer and the Skeleton. Martin Dunitz, London: 21-32, 2000.

427. Mundy GR and Guise TA. Pathophysiology of bone metastasis. In: Mundy GR, Rubens RD (eds.) Cancer and the Skeleton. Martin Dunitz, London: 43-64, 2000.

*428. Uy HL, Mundy GR, Yin JJ, Dallas M, Park HR, Story B, Grubbs BG, Boyce BF, Roodman GD, Guise TA. Dexamethasone inhibits bone metastasis caused by human breast cancer via several mechanisms. (In preparation).

*429. Chen D, Ji X, Harris MA, Feng JQ, Karsenty G, Celeste AJ, Rosen V, Mundy GR, Harris SE. Differential roles for bone morphogenetic protein (BMP) receptor type IB and IA in differentiation and specification of mesenchymal precursor cells to osteoblast and adipocyte lineages. J Cell Biol 142(1): 295-305, 1998.

*430. Yin JJ, Selander K, Chirgwin JM, Dallas M, Grubbs BG, Wieser R, Massague J, Mundy GR, Guise TA. TGFß signaling blockade inhibits PTHrP secretion by breast cancer cells and bone metastases development. J Clin Invest 103(2): 197-206, 1999.

431. Mundy GR. Introduction to the Osteoporosis Guidelines Symposium. 1998.

432. Mundy GR, Yates AJ, Reasner CA. Hypercalcemia of Malignancy. Encyclopedia of Human Biology, 2nd Edition, 4: 653-660, 1997.

*433. Dunstan CR, Boyce R, Boyce BF, Garrett IR, Izbicka E, Adams R, Burgess WH, Mundy GR. Systemic administration of acidic fibroblast growth factor (FGF-1) prevents bone loss and increases new bone formation in ovariectomized rats. J Bone Min Res 14(6): 953-959, 1999.

*434. Pathophysiology of Skeletal Metastasis - Proceedings of ASCO, Winter, 1-4, 1998.

*435. Guise TA, Mundy GR. Cancer and Bone. Endocrine Reviews 19:18-54, 1998.

*436. Body JJ, Bartl R, Burckhardt P, Delmas PD, Diel IJ, Fleisch H, Kanis JA, Kyle RA, Mundy GR, Paterson AH, Rubens RD. Current use of bisphosphonates in oncology. J Clin Oncology 16(12): 3890-3899, 1998.

437. Mundy GR. Foreword. In: Arnett TR, Henderson B (eds). Methods in Bone Biology. Chapman & Hall, ix, London, 1998.

438. Mundy GR, Yoneda T, Guise T. Hypercalcemia in hematologic malignancies and in solid tumors associated with extensive localized bone destruction. In: Primer on the Metabolic Bone Diseases and Disorders of Metabolism. Lippincott-Raven, Philadelphia, 1999.

439. Mundy GR. Bone Remodeling. In: Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism. Lippincott-Raven Publishers, Philadelphia, 1999.

440. Mundy GR, Guise TA. Biology of bone metastases. In: Lippman M, Morrow M, Osborne CK. Diseases of the Breast, 2nd Edition, Lippincott-Raven, Philadelphia, 911-20, 2000.

441. Mundy GR. Cellular and molecular regulation of bone turnover. In: Proceedings of the International Symposium on Paget's Disease, Oxford, 1998.

442. Mundy GR. What can we learn from bone biology for the treatment for osteoporosis? Osteoporosis International Suppl. 2: S40-S47, 1999.

*443. Traianedes K, Dallas MR, Garrett IR, Mundy GR, Bonewald LF. 5-lipoxygenase metabolites inhibit bone formation in vitro. Endocrinology139(7): 3178-3184, 1998.

*444. Dallas SL, Garrett IR, Oyajobi B, Dallas MR, Boyce BF, Bauss F, Radl J, Mundy GR. Ibandronate reduces osteolytic lesions but not tumor burden in a murine model of myeloma bone disease. Blood 93(5): 1697-1706, 1999.

*445. Mbalaviele G, Nishimura R, Myoi A, Reddy SV, Chen D, Feng J, Roodman GD, Mundy GR, Yoneda T. Cadherin-6 mediates the heterotypic interactions between the hemopoietic osteoclast precursors and stromal cells in a murine model of osteoclast differentiation. J Cell Biol 141(6): 1467-

1476, 1998.

*446. Nishimura R, Moriyama K, Yasukawa K, Mundy GR, Yoneda T. Combination of interleukin-6 and soluble interleukin-6 receptors induces differentiation and activation of JAK-STAT and MAP kinase pathways in MG-63 human osteoblastic cells. J Bone Min Res 13(5): 777-785, 1998.

447. Mundy GR and Yoneda T. Bisphosphonates as anti-cancer drugs. New Engl J Med 339(6): 398-400, 1998.

*448. Diel IJ, Mundy GR. Bisphosphonates in the adjuvant treatment of cancer: experimental evidence and first clinical results. International Bone and Cancer Study Group (IBCG). Br J Cancer 82(8):1381-6, 2000.

449. Mundy GR. The Article Reviewed. "Use of Bisphosphonates in Patients with Metastatic Bone Disease." Berenson/Lipton. Oncology 11:1580-1581, 1998.

450. Mundy GR. Bisphosphonates as Cancer Drugs. Hospital Practice 34(5):81-4, 88-9, 93-4, 1999.

*451. Chen D, Harris MA, Rossini G, Dunstan CR, Dallas SL, Feng JQ, Mundy GR, Harris SE. Bone morphogenetic protein 2 (BMP-2) enhances BMP-3, BMP-4, and bone cell differentiation marker gene expression during the induction of mineralized bone matrix formation in cultures of fetal rat calvarial osteoblasts. Calcif Tiss Int 60: 283-290, 1997.

452. Mundy GR, Chen D, Zhao M, Dallas S, Xu C, and Harris S. Growth regulatory factors and bone. In: Reviews in Endocrine and Metabolic Disorders. Edited by Derek LeRoith. 2:105-115, 2001.

453. Mundy GR. Cytokines, Growth Factors, and Malignancy. In: Skeletal Growth Factors. Edited by Ernesto Canalis. Lippincott Williams & Wilkins, Philadelphia, 2000.

*454. Marzia M, Sims NA, Voit S, Migliaccio S, Taranta A, Bernardini S, Faraggiana T, Yoneda T, Mundy GR, Boyce BF, Baron R, Teti A. Decreased c-src expression enhances osteoblast differentiation and bone formation. J Cell Biol 151(2):311-320, 2000.

*455. Michigami T, Shimizu N, Williams PJ, Niewolna M, Dallas SL, Mundy GR, Yoneda T. Cell-Cell contact between marrow stromal cells and myeloma cells via VCAM1 and $\alpha_4\beta1$ integrin enhances production of osteoclast stimulating activity Blood 96(5): 1953-1960, 2000.

*456. Dallas SD, Keene DR, Bruder SP, Saharinen J, Sakai LY, Mundy GR, Bonewald LF. Role of the latent-TGFβ binding protein-1 in fibrillin-containing microfibrils in bone cells in vitro and in vivo. J Bone Miner Res 15(1): 68-81, 2000.

457. Mundy GR. Cellular and Molecular Regulation of Bone Turnover. Bone 24(5 Suppl): 35S-38S, 1999.

458. Mundy GR and Guise TA. Hormonal Control of Calcium Homeostasis. Clinical Chemistry 45(8 Pt 2): 1347-1352, 1999.

*459. Mundy GR, Garrett IR, Harris SE, Chan J, Chen D, Rossini G, Boyce BF, Zhao M, Gutierrez G. Stimulation of bone formation in vitro and in rodents by statins. Science 286: 1946-1949, 1999.

460. Mundy GR. Bisphosphonates as Anti-Cancer Drugs. Exp Opin Invest Drugs 8(12): 2009-2015, 1999.

461. Mundy, GR. Myeloma Bone Disease. Myeloma Today. Volume 1, Issue 10, Summer 1995.

462. Mundy, GR. Pathogenesis of Osteoporosis and Challenges for Drug Delivery. Adv Drug Deliv Rev 42(3): 165-173, 2000.

463. Mundy GR, Garrett IR, Gutierrez G. HMG Co-A reductase inhibitors and their effects on bone. Clinical Calcium (Japanese journal) (in press).

464. Mundy GR. Normal bone remodeling vs. malignant bone remodeling. NCCN Guidelines Brochure. (in press)

465. Bruder JM and Mundy GR. Statins and their effects on bone formation. The Endocrinologist 10:225-228, 2000.

466. Mundy GR, Oyajobi B, Traianedes K, Dallas S, Chen D. Cytokines and bone remodeling. In: Osteoporosis, 2E, Marcus B, Kelsey J, Feldman D (eds), Academic Press, New York, Chapter 13:373-470, 2001.

*467. Diel IJ and Mundy GR. Bisphosphonates in the adjuvant treatment of cancer: experimental evidence and first clinical results. British Journal of Cancer 82: 1381-1386, 2000.

468. Bruder JM, Guise TA, Mundy GR. Mineral Metabolism. In: Endocrinology and Metabolism, 4th edition, McGraw Hill, Felig P, Frohman L (eds.), 1079-1179, 2001.

469. Mundy GR. Myeloma bone disease – update. Hammersmith Course in Hematology, June, 2000 (in press).

470. Mundy, GR. Bone Metabolism, Bone Disease, and the Bisphosphonates. Myeloma Today. Volume 4, Issue 5, June 2001.

471. Chen D, Zhao M, Oyajobi B, Mundy GR. Update in Bone Cell Biology. In: Osteoporosis and Bone Biology, edited by Juliet Compston and Stuart Ralston. International Medical Press, United Kingdom 29-41, 2000.

*472. Michigami T, Hiraga T, Williams PJ, Niewolna M, Nishimura R, Mundy GR, Yoneda T. The effect of the bisphosphonate ibandronate on breast cancer metastasis to visceral organs. Breast Cancer Res Treat. 75(3):249-58, 2002.

*473. Hiraga T, Williams PJ, Mundy GR, and Yoneda T. The bisphosphonate ibandronate promotes apoptosis in MDA-MB-231 human breast cancer cells in bone metastases. Cancer Res 61(11): 4418-24, 2001.

*474. Maddox E, Zhan M, Mundy GR, Drohan WN, Burgess WH. Optimizing human demineralized bone matrix for clinical application. Tissue Eng 6(4): 441-448, 2000.

475. Mundy GR, Gutierrez G, Gallwitz W, Feng J, Chen D, Garrett R, Harris S. Antler-derived bone growth factors and their potential for use in osteoporosis. In: Antler Science and Product Technology, Sim, JS, Sunwoo, HH, Hudson, RJ, Jeon, BT, eds. ASPTRC. 2001.

476. Mundy GR. Secondary osteoporosis – the potential relevance of leptin and low body weight. Ann Intern Med. 133(10):828-30, 2000.

477.

478. Mundy GR. Prospects for new therapies in bone diseases. Proceedings of the 11th Vitamin D Workshop, Nashville, May, 2000.

*478. Oyajobi BO, Deng JH, Dallas SL, Jenson HB, Mundy GR, Gao S-J. Absence of herpesvirus DNA sequences in the 5T murine model of human multiple myeloma. Brit J Hematol 109(2): 413-419, 2000.

*479. Ji X, Chen D, Xu C, Harris SE, Mundy GR, Yoneda T. Patterns of gene expression associated with BMP-2-induced osteoblast and differentiation of mesenchymal progenitor cell 3T3-F442A. J Bone Miner Res 18(3): 132-139, 2000.

*480. Mundy GR, Yoneda T, Guise T. Animal models and bisphosphonate treatment. (in press).

481. Mundy GR, Yoneda T, Guise TA, Oyajobi B. Local factors in skeletal malignancy. In: Principles of Bone Biology 2E. Bilezikian J, Raisz L, Rodan G, (eds). Academic Press, Inc., San Diego, CA. Chapter 61: 1093-1104, 2002.

*482. Oyajobi BO, Traianedes K, Harris MA, Harris SE, Yoneda T, Mundy GR. RANK ligand expression in a model of myeloma bone disease: dependence on tumor cell-marrow stromal cell interactions. J Clin Invest (submitted).

483. Mundy GR. Advances in the biology and treatment of metastatic bone disease. Proceedings of ASCO, 37th Annual Meeting, Spring, pp.164-172, 2001.

484. Mundy GR. Maintaining the balance. Orgyn 3:32-36, 2001.

*485. Oyajobi BO, Anderson DM, Traianedes K, Williams PJ, Yoneda T, Mundy GR. Therapeutic efficacy of soluble receptor activator of nuclear factor kappaB-IgG Fc fusion protein in suppressing bone resorption and hypercalcemia in a model of humoral hypercalcemia of malignancy. Cancer Res 61(6):2572-78, 2001.

486. Mundy GR, Yoneda T, Hiraga T. Preclinical studies with zoledronic acid and other bisphosphonates: impact on the bone microenvironment. Semin Oncol 28(2 Suppl 6):35-44, 2001.

487. Mundy GR. Research needs in myeloma. Oncology Spectrum. 2:2, 81-110, 2001.

488. Mundy G. Preclinical models of bone metastases. Proceedings of the San Antonio Roundtable Meeting. Semin Oncol, Vol 28, No 4, Supp II, (August) 2001:2-8

489. Mundy GR. Directions of Drug Discovery in Osteoporosis. Ann Rev Med 53:337-54, 2002

490. Garrett IR, Chen D, Gutierrez G, Zhao M, Escobedo A., Rossini G, Harris SE, Gallwitz W, Kim KB, Hu S, Crews CM, Mundy GR. Selective inhibitors of the osteoblast proteasome stimulate bone formation in vivo and in vitro. J Clinical Investigation, 111(11):1771-1782, 2003.

491. Mundy GR. Osteoporosis: pathophysiology and non-pharmacologic management. Best Prac Res Clin Rheumatol 15 (5);727-45, 2001.

492. Mundy GR. Bone metabolism, bone disease and the bisphosphonates. Comprehensive Guide to Banff: Understanding the VIIIth International Myeloma Workshop-8th International Bone Conference, 16-17, 2001.

493. Mundy GR, Garrett IR, Gutierrez G. Bone and statins. (in preparation).

494. Mundy GR, Oyajobi B. Other local and ectopic hormone syndromes associated with hypercalcemia. In: The Parathyroids: Basic and Clinical Concepts, Bilezikian, JP (2nd edition), Academic Press, Inc., San Diego, CA. Chapter 43, pp. 691-705, 2001.

495. Mundy GR. Statins and their potential for osteoporosis. Bone 29(6): 495-97, 2001.

496. Garrett IR, Gutierrez G, Mundy GR. Statins and bone formation. Curr Pharm Des 7(8):715-36, 2001.

*497. Xu SC, Harris MA, Rubenstein JL, Mundy GR, Harris SE, Bone morphogenetic protein-2 (BMP-2) signaling to the Col2alpha1 gene in chondroblasts requires the homeobox gene Dlx-2. DNA Cell Biol. 20(6):359-65, 2001.

*498. Ghosh-Choudhury N, Choudhury GG, Harris MA, Wozney J, Mundy GR, Abboud SL, Harris SE. Autoregulation of mouse BMP-2 gene transcription is directed by the proximal promoter element. Biochem Biophys Res Commun. 286(1):101-8, 2001.

499. Mundy GR, Chen D. Zhao M, Dallas S, Xu C, Harris S. Growth regulatory factors and bone. Rev Endocr Metab Disord. 2(1):105-15, 2001.

500. Mundy GR. Osteoporosis: pathophysiology and non-pharmacological management. Best Pract Res Clin Rheumatol. 15(5):727-45, 2001.

*501. Dallas SL, Rosser JL, Mundy GR, Bonewald LF. Proteolysis of latent transforming growth factor-beta (TGF-beta)-binding protein-1 by osteoclasts. A cellular mechanism for release of TGF-beta from bone matrix. J Biol Chem. 277(24):21352-60, 2002.

*502. Zhao M, Harris SE, Horn D, Geng Z, Nishimura R, Mundy GR, Chen D. Bone morphogenetic protein receptor signaling is necessary for normal murine postnatal bone formation. J Cell Biol. 157(6); 1049-60, 2002.

503. Garrett IR, Mundy GR. The roles of statins as potential targets for bone formation. Arthritis Res. 4(4):237-40, 2002.

504. Mundy GR. Bisphosphonates and tumor burden. J Clin Oncol. 20(15):3191-2, 2002.

505. Mundy GR. Metastasis to bone: causes, consequences and therapeutic opportunities. Nature Rev Cancer. 2(8):584-93, 2002.

506. Chen D, Zhao M, Mundy GR. Bone Morphogenic Proteins. *In* Encyclopedia of Hormones, HL

Henry, AW Norman (eds). Academic Press, San Diego, CA pp 205-209, 2003.

*507. Gallwitz WE, Guise TA, Mundy GR. Guanoisine nucleotides inhibit different syndromes of PTHrP excess caused by human cancers in vivo. J Clin Invest. 110(10):1559-72, 2002.

508. Oyajobi BO, Mundy GR. Receptor activator of NF-kappaB ligand, macrophage inflammatory protein-1alpha, and the proteasome: novel therapeutic targets in myeloma. Cancer. 97(3 Suppl):813-7, 2003.

509. Kakonen SM, Mundy GR. Mechanisms of osteolytic bone metastases in breast carcinoma. Cancer. 97(3 Suppl):834-9, 2003.

*510. Oyajobi BO, Franchin G, Williams PJ, Pulkrabek D, Gupta A, Munoz S, Grubbs B, Zhao M, Chen D, Sherry B, Mundy GR. Dual effects of macrophage inflammatory protein-1 {alpha} on osteolysis and tumor burden in the murine 5TGM1 model of myeloma bone disease. Blood. 102(1):311-319, 2003.

*511. Zhao M, Qiao M, Oyajobi BO, Mundy GR, Chen D. E3 ubiquitin ligase smurf1 mediates Cbfa1/Runx2 degradation and plays a specific role in osteoblast differentiation. J Biol Chem. 278(30):27939-27944, 2003.

*512. Feng JQ, Xing L, Zhang JH, Zhao M, Horn D, Chan J, Boyce BF, Harris SE, Mundy GR, Chen D. NF-kappaB specifically activates BMP-2 gene expression in growth plate chondrocytes in vivo and in a chondrocyte cell line in vitro. J Biol Chem 278(31):29130-29135, 2003.

513. Mundy GR, Stewart AF. Common Disorders of Bone and Mineral Metabolism. *In:* Comprehensive Clinical Endocrinology, Besser, GM, Thorner, MO, eds. (3rd edition), Mosby, Edinburgh, Scotland. Chapter 34, pp. 501-516, 2002.

*514. Bauer DC, Mundy GR, Jamal SA, Black DM, Cauley JA, Ensrud KE, vander Klift, M. Use of statins and fracture: Results of four prospective studies and cumulative meta-analysis of observational studies and controlled trials. Arch Int Med 164(2):146-152, 2004.

515. Mundy GR. Does clodronate treatment affect non-boney metastases in breast cancer? BoneKEy 2002 Aug 2810.1138/ibmske; 2002058v1.

516. Oyajobi B, Mundy GR. Pathophysiology of myleoma bone disease. *In* Durie BS, G Gahrton, DS Samson (eds): Multiple Myeloma and Related Disorders (2nd edition). Part 2, Chapter 6. Arnold, London, pp74-88; 2004.

517. Mundy GR, Chen D, Oyajobi BO. Bone remodeling. *In* Favus, M (ed): ASBMR Primer on the Metabolic Bone Diseases and Disorders of Mineral Metabolism (5th edition). ASBMR, Washington, D.C. Chapter 7, pp 46-58, 2003.

518. Mundy GR. *In:* Manual de osteoporosis y metabolismo mineral. Riancho, JA, Macias JG (eds). Jarpyo, Madrid, in press.

519. Oyajobi BO, Mundy GR. Radl 5T murine myelomas: in vivo models of human multiple myeloma. (invited review). Current Topic in Microbiology and Immunology in press.

520. Mundy, GR. Myeloma Bone Disease—Update 2003. Myeloma Today. Volume 4, Issue 10, June 2003.

521. Mundy, GR. Endothelin-1 and Osteoblastic Metastasis. Proc Natl Acad Sci 100(19):10588-10589, 2003.

522. Myoui A, Nishimura R, Williams PJ, Hiraga T, Tamura D, Michigami T, Mundy GR, Yoneda T. c-Src tyrosine kinase activity is associated with tumor colonization in bone and lung in an animal model of human breast cancer metastasis. Cancer Res 63(16): 5028-5033, 2003.

523. Zhao M, Qiao M, Harris SE, Oyajobi BO, Mundy GR, Chen D. Smurf1 inhibits osteoblast differentiation and bone formation in vitro and in vivo. J Biol Chem 279(13):12854-12859, 2004.

524. Chen D, Zhao M, Mundy GR. Bone Morphogenetic Proteins. *In* Growth Factors, A Burgess (ed). Taylor and Francis Publishers, 22(4):233-41, 2004.

525. Mundy GR. Realising the potential of anti-host cell therapy. Cancer Today (Supplement 1):6-8, 2004.

526. Mundy GR. The evolving role of bisphosphonates: Cancer treatment—induced bone loss. Oncology (supplement), 18(5 Suppl 3):9-10, 2004.

528. Mori Y, Shimizu N, Dallas M, Niewolna N, Story B, Williams PJ, Mundy GR, Yoneda T. Anti-a4 integrin antibody suppresses the development of multiple myeloma and associated osteoclastic osteolysis. Blood 104(7):2149-52, 2004.

529. Rowe, P. S. N., Kumagai, Y., Gutierrez, G., Garrett, I. R., Blacher, R., Rosen, D., Cundy, J., Navvab, S., Chen, D., Drezner, M. K., Quarles, L. D., and Mundy, G. R. MEPE has the properties of an osteoblastic Phosphatonin and Minhibin. Bone 34:303-319; 2004.

530. Rowe, Peter. S. N., Garrett, Ian. R., Schwarz, Patricia. M.,Carnes, David. L., Lafer, Eileen. M., Mundy, Gregory. R., and Gutierrez, Gloria. E. Surface Plasmon Resonance (SPR) confirms MEPE binds to PHEX via the MEPE-ASARM-motif:A model for impaired mineralization in X-linked rickets (HYP). Bone 36(1):33-46, 2005.

531. Mundy, GR. How can bone turnover markers be best utilized for prediction of skeletal events in patients with solid tumors? Nature Clinical Practice Oncology. 2(5):242-3, 2005.

532. Oyajobi, BO, Shipman, CM, Mundy, GR. Recent insights into myeloma bone disease. IBMS BoneKey, 2005 May 1 10.1138/20050161.

533. Mundy GR. Statins and their potential for osteoporosis. IMBS BoneKey 2001 June 1 10.1138/2001029.

534. Coleman, RE, Martin TJ, Mundy GR. Meeting report from the Vth International Conference on cancer-induced bone disease: March 20-24, 2005 in Davos, Switzerland. IBMS BoneKey 2005 Apr 1 10.1138/20050158.

535. Black DM, Cosman F, Eastell R, Mundy GR and Rosen, CJ. Meeting report from the National Osteoporosis Foundation 5th International Symposium on Clinical Advances in Osteoporosis. IBMS BoneKey 2002 May 5 10.1138/2002038.

536. Zhang Y, Padalecki SS, Chaudhuri AR, De Waal, E, Goins BA, Grubbs B, Story BM, Ikeno Y, Richardson A, Mundy GR, Herman B. Caspase-2 modulates mouse phenotypes at advanced ages. Submitted.

537. Mundy GR. Pathophysiology of Osteoporosis in Rheumatology 4th edition (in press)

538. Mundy GR. Bone disease of myeloma. *In* IMF Guide to International Conference on Myeloma, Sydney 2005 (in press)

539. Mundy GR. Hypercalcemia of malignancy. *In* Clinical Endocrine Oncology. May I, Turner H, Wars J, eds (2nd edition). Blackwell (in press)

540. Mundy GR. Bone-anabolic agents. *In* Current Opinion in Pharmacology. Elsevier (in press)

541. Mundy GR, Oyajobi, K, Zhao, M, Padalecki, SS, Sterling, JA, Harris S: Cytokines and bone remodeling. In: Osteoporosis, Marcus B, Kelsey, J, Feldman D (eds), Academic Press, New York, 2nd edition (in press).

542. Mundy GR. In Memoriam: Dr. Gideon Rodan. Bone 38: 297-299, 2006.

543. Gutierrez GE, Lalka D, Garrett IR, Rossini G, Mundy GR. Transdermal application of lovastatin to rats causes profound increases in bone formation and plasma concentrations. Osteoporosis International 17(7):1033-42, 2006.

544. Mundy GR. Nutritional modulators of bone remodeling during aging. Am J Clin Nutr 83(2):427S-430S, 2006.

545. Shipman CM, Oyajobi BO, Mundy GR. Advances in the management of myeloma bone disease. Expert Opin Pharmacother 6(16):2781-01, 2005.

546. Mundy GR, Elefteriou F. Boning up on Ephrin Signaling. Cell. 126(3):441-3, 2006.

547. Sterling JA, Oyajobi BO, Grubbs B, Padalecki SS, Munoz SA, Gupta A, Story B, Zhao M, Mundy GR. The hedgehog signaling molecule Gli2 induces parathyroid hormone-related peptide expression and osteolysis in metastatic human breast cancer cells. Cancer Res. 66(15):7548-53, 2006.

548. Zhao M, Qiao M, Harris SE, Chen D, Oyajobi BO, Mundy GR. The zinc finger transcription factor Gli2 mediates bone morphogenetic protein 2 expression in osteoblasts in response to hedgehog signaling. Mol Cell Biol. 26(16):6197-208, 2006.